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# A HISTORY OF EARLY CHINESE ART \* THE PREHISTORIC AND PRE-HAN PERIODS





# A HISTORY OF EARLY CHINESE ART \* THE PREHISTORIC AND PRE-HAN PERIODS

# BY OSVALD SIRÉN

OF THE NATIONAL MUSEUM AND THE UNIVERSITY
OF STOCKHOLM

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#### **PREFACE**

The time is not yet ripe for anything like a complete history of Chinese art because, although the material may already seem bewildering, more is, no doubt, hidden away at inaccessible places or deep in the soil of China. But who knows whether all this will ever become available to students before it is destroyed through warfare and carelessness? My intentions have not been to attempt anything of the kind, but simply to co-ordinate the most important bits of historical knowledge available at present regarding the early arts of China with my own observations during my travels in the East and my studies in the collections of Europe and America. I have, indeed, been forced to a rigid selection and naturally have used the documents which are most familiar to me and which I myself, in part, have photographed.

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Two main principles have been considered in the general arrangement and classification of the materials, the one being of a chronological, the other of a material order, and in attempting to combine these two I have been led to the conclusion that the decorative arts of China (bronzes, ceramics, jades, etc.) cannot be treated without a division into various consecutive volumes, whereas sculpture, architecture and painting may be discussed more independently, each in a separate volume. My main interest as a student has of course been fixed on the evolution of style in these various domains of art and on those historical and religious events which had some influence on the formation of the arts in China.

It would not have been possible for me to present such an important mass of new material in this book, if I had not had the kind co-operation and assistance of a number of prominent collectors and museum officials to whom I here wish to convey my sincere thanks, not only for offering me facilities of study, but also for giving me permission to take a great number of photographs when such did not already exist. The names of these collectors and institutions will be found on the plates where their objects are reproduced, and it may thus be superfluous to repeat them here.

Among specialists of Chinese archæology who by their good advice and illuminating discussions have supported my efforts in preparing this publication should be particularly mentioned Professor J. G. Andersson of Stockholm, who has kindly read the parts dealing with the earliest periods, and Professor T. Sekino of the Tokyo Imperial University, who at the time of my visit to Japan, a few years ago, gave me many important points in reference to the evolution of architecture in China and Japan.

The preparation of this publication has developed through various stages by which it has grown from a small Swedish handbook on Chinese art into a work in several volumes published in English and French. The accumulation and rearrangement of the materials—both illustrations and text—have been a rather slow and gradual

process, as I could only devote a minor part of my time to the work, and I doubt whether I would have been able to carry the four volumes now ready through their final stage, had it not been for the valuable assistance that I received from my friend M. Jean Buhot, who also has kindly consented to read the proofs during my absence in the Far East, for all of which my most sincere thanks are due to him.

o. s.

Paris, December, 1928.

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#### NOTE

In the detailed description accompanying the plates the letters E.A.C. signify the East Asiatic Collections, Stockholm. The letters between brackets signify those who have secured the objects in China; thus—

J.G.A.—Professor Andersson O.K.—Mr. Karlbeck O.S.—Professor Sirén.

## PREHISTORIC INTRODUCTION

It is not yet possible to advance any definite date from which we can reckon the beginning of Chinese art and civilization. Even more than in the case of other surviving nations whose earliest artistic creations may still be the object of study, it may be said of China that the origins are enveloped in darkness. They appear to be beyond the bounds of historical evidence. Only in the last few years has archæological research opened up a chink in the wall which has hitherto confined our conceptions of Chinese civilization, though the results achieved have not yet been fully explored. Moreover, it may be said of Chinese civilization, as of other similar phenomena, that it is only a link in a long chain of development. Wave after wave of new races has rolled over the Asiatic plains, some of them imparting important artistic impulses, though on reaching the Far East they gradually melted away in the ocean which we call China. Thus it has grown and expanded by tributaries which we can partially trace, but of which the deepest sources remain obscure. These latter must be sought in the psyche of the resident population rather than in any external circumstances.

Wherever we may assume Chinese civilization to begin, no one will deny to it a greater antiquity than that of any other living civilization, or a continuity which, despite foreign influence, is reflected in its artistic forms of expression. If we seek to trace these, we are therefore confronted with a very comprehensive problem, the more difficult because so little fundamental and specialized work has as yet been done, and because the bulk of the material has consequently not yet been classified. We must content ourselves with an investigation of certain characteristic groups and seek to discover in them the general development of style, though it must be obvious that within the limited space here available, only highly simplified outlines can be sketched. The material, indeed, stretches over a period of more than 3,000 years, and over a geographical area which in magnitude may be compared with the whole of Europe. Since, moreover, there are offshoots in various parts of Asia, it is clear that an account such as the present one can only comprise the most salient features. If anybody should object that, strictly speaking, much of this material falls within the province of archæology rather than of the history of art, it may be answered, that as regards China no history of art is possible without the closest co-operation with archæology.

It is especially the earliest historical and pre-historic material which makes the history of Chinese art so unusually attractive, not to say exciting, because of the ever-recurring surprises, new forms, styles and influences, in the interpretation of which such different opinions may prevail. The archæological excavations which have so far been carried out are scarcely more than a drop in the ocean, especially if we bear in mind the immense antiquity and the colossal expanse of the country. It is in the nature of things, therefore, that our account must be of a provisional

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nature—but what is not provisional concerning China, which is at present passing through a period of social and political convulsions during which any comprehensive scientific work seems premature?

. . . . . . . . .

The most ancient political and cultural development in China has been embodied in the persons of certain great rulers. The Chinese themselves like to date the beginning of their history from Huang-ti, the Great Emperor, who is reputed to have lived about the middle of the third millennium, and who took his name from the yellow earth. He is supposed to have ruled for a hundred years and to have secured Chinese supremacy by his victories over Chih-yü and other wild native tribes. Moreover, he is said to have taught his people how to make implements and vessels of wood, clay and metal, and to have introduced copper coins. He is the great mythical king, the ancestor of the real China, and, like corresponding figures in the history of other races, the incarnation of combined mythological and cultural traditions. It would appear, however, on both archæological and philological evidence, to be beyond doubt that as early as the middle of the third millennium the Chinese were in possession of an ordered social organization. They were a settled agricultural people, dwelling principally east of the bend of the Yellow River in modern Honan and southern Shansi, and they were probably familiar with the working of metals for simple weapons, ornaments and coins. From the same time dates the appearance of the Chinese written characters.

Tradition draws in somewhat firmer outline the figures of the three great emperors Yao, Shun, and Yü, the first to be mentioned in the annals of Shu ching, even though they must still be regarded rather as personified traditions, originating in a mythological golden age, than as real personalities. Since the days of Confucius, the real significance of Yao and Shun has been as the ideal prototypes of the wise and just ruler, and the "Great Y" has won renown as the one who staved off the mighty floods which visited the country at the end of the third millennium. The traditions associated with his regulation of the floods have been preserved in a highly fantastic form in Shu ching, where an account is given of Yü's battle with dragons and gigantic monsters, and there may, indeed, be a grain of truth underlying all these mythical stories: an exceptionally severe flood is supposed to have afflicted China about this time and it is thought that the measures of protection consisted in the construction of canals, etc., by which the devastating floods were carried away to the sea. When the catastrophe was happily staved off a complete reorganization of the country was undertaken, and it was divided into nine provinces, a division which is perpetuated and reflected in the far-famed nine bronze tripods. According to tradition, these latter were cast from metal furnished by the different provinces and decorated with images of objects characteristic of the respective provinces, as well as demons and monsters, but we have no precise account of the appearance of these bronze vessels. We only know that owing to their origin and their ornamentation they were regarded as the sacred palladium of the country and that they remained in the possession of the

#### THE PREHISTORIC PERIOD

reigning princes until the end of the Chou dynasty, when they were sunk in a river in order that they should not fall into the hands of the victorious king of Ch'in. All efforts to recover them from the river proved vain, and it may be mentioned that this ruler again had metal objects collected from the various provinces, which were not transformed into sacrificial vessels but into twelve gigantic statues, erected in front of the imperial palace.

Although it is not in our power to check the statements concerning the Great Yü's nine bronze tripods, yet on the other hand, there is no reason to regard them as a pure invention. The technique of casting bronze was quite certainly well known in China about two thousand years B.C. and tripod vessels of that date made of baked grey clay are known. Most of them belong to the so-called li type, i.e. jaror bowl-shaped vessels, of which the three hollow, downward tapering legs constitute a prolongation of the body of the vessel. There exist, however, also examples of so-called ting tripods of this early period, i.e. round cups or bowls on three solid columnar feet. Whether Yü's nine tripods belonged to the former or the latter class is hard to say, though it may be remarked that the ting type is the one most commonly followed in the bronzes of the Chou period. The Chinese have, indeed, in all ages, harboured a strong preference for three-footed vessels, as we shall have occasion to notice during our study of the sacrificial bronzes of the successive periods.

The earliest archæological discoveries of artistic importance which have as yet been made in China are mainly of a ceramic kind. They were principally made during Professor J. G. Andersson's excavations in the most north-westerly province of the country, Kansu, though also nearer the centre, in the province of Honan, as well as in Shansi and in southern Manchuria. No small part of this remarkably abundant archæological material is preserved in the East Asiatic Collections in Stockholm, but the scientific study and classification of the material has only just begun. Professor Andersson has, it is true, published a short account of the general nature and relative chronology of the material in his Preliminary Report on Archæological Research in Kansu (1925) and has reported on the earlier discoveries in Honan in a publication called An Early Chinese Culture (1923), but no more exhaustive examination of the very comprehensive archæological and historical problems which this material presents has yet appeared. It is therefore too early to draw any definite historical conclusions from this large ceramic material. We must confine ourselves to a brief reference to Professor Andersson's report, supplemented by observations on that part of the material which is now (1928) exhibited in Stockholm.

The extraordinary significance of this primitive pottery, which until a few years ago was quite unknown, is that it puts back the beginning of the civilization and the artistic culture of China a couple of thousand years earlier than was indicated by previous discoveries, and that it bears testimony to a close contact between China and western Asia during the third and second millennium B.C. It is evident that the material extends over a very considerable period of time, and it seems, at least in part, to reflect successive waves of cultural influences, or of the new races, which from

time to time penetrated into the country. To what extent they reached the interior of what is now known as China and settled there, it is impossible to determine until excavations have been made in several places, though if we may judge by the localities of the archæological excavation as yet performed, it is by no means certain that the originators of this prehistoric pottery were the same people as those who formed the nucleus of the Chinese nation.

According to the chronological system established by Professor Andersson, the earliest specimens may date from the middle of the fourth millennium, which in China is regarded as the close of the neolithic age, but the great majority of the discoveries are considered to originate in the æneolithic age, i.e. the transition period from the stone age to the bronze age, when copper especially came into use for weapons, etc. Within this long period six successive periods or groups are noticeable, distinguished by more or less definite forms or types and ornamental motives.

To Group I, which is called after the place of discovery, Ch'i-chia-ping in Kansu, are referred principally unpainted vessels of a light brownish or brickcoloured clay, the majority of which are of a rather clear cut and severe shape. Remarkable are the vases and jug-like vessels with strongly emphasized hip and neck lines and large handles connecting neck and body. The ware is comparatively thin, with a smooth, polished surface (Plate 1 A, B). The ornamentation is extremely sparing and consists mainly of simple geometrical patterns, scratched or pressed in with a sharp instrument (possibly the finger nail); painted ornamentation, of a very simple linear type, is only of exceptional occurrence. The group includes. however, also a number of fragments of so-called comb ceramic, i.e. vessels which have been ornamented with an instrument which produces patterns of thin raised lines on a flat ground. The well-built, sharply divided and rather stiff shapes cannot fail to suggest metallic prototypes, but if such have existed, they must have been developed elsewhere than in China, the influence—i.e. the general shapes—having reached further than the actual objects. The question arises whether the vessels which are referred to this first group really are all of the same age. The simple scratched ornamentation may well be regarded as a preliminary stage to the ornamentation of the following period (sometimes also scratched), but some of the forms appear to us less primitive than those which we encounter in the next group. Period II is called after the site of the excavations in Yang-shao-ts'un in western Honan, where the excavations were made earlier than in Kansu and where a quantity of painted pottery was also found, which seems almost contemporary with that which was dug up in two larger fields of excavation, Pan-shan and Chu-chia-chai, as well as at numerous dwelling places in Kansu. A considerable number of jars belonging to the same group have furthermore been purchased from the people on the spot, a source which has also been exploited by Chinese and European art dealers. In the tombs of the period there have also been found well-executed polished implements of stone and ornaments of bone and jade.

Characteristic of the great majority of these Kansu jars is the broad and full calabash form, with or without cylindrical neck, a shape which for very natural

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reasons is found in primitive pottery in various parts of the world. It is true that there occur here too a number of other more cup-like or vase-like forms, but these do not either betray the least influence of the metallic art. They are pure ceramic products, developed in accordance with the nature of the material, and executed by hand (with the help of some simple wooden instrument) without the use of any potter's wheel. In short, both the forms and the technique confirm the impression that we are in the presence of works of the primitive potter, which, however, have received a remarkable artistic emphasis from the painted decoration. The latter is usually carried out with black and browny red, or black and reddish violet on the lighter grey-brown or reddish ground. Side by side with these, however, and in the same tombs, there also occur unpainted vessels with simple line decoration, which has been achieved by superimposing thin bands, impressed in wave form or scolloped with some sharp instrument, possibly with the purpose of suggesting a rope or string motive. In all probability these monochrome vessels represent the earliest stage of development in ornamentation, and it is quite possible to detect a certain relationship between them and a number of vessels with scratched ornamentation in the preceding group. The great majority of the vessels of the second period derive their artistic interest, however, from the painted decoration.

The motives are many and varied, and they are as a rule executed with remarkable verve and freedom. Especially favoured are the large continuous spirals (usually four, arranged in pairs in opposition) (Plate 2D) and the bulbous or basket-shaped figures (Plate 2 A, B), filled out with a net or lattice-work of finer lines. There also occur various combinations of wave lines and a kind of festoon with regular curves and concentric bands in two or three colours (Plate 2 c). Less common are the rectilinear motives, whether in check pattern or larger pairs of squares and triangles, which, however, are drawn with just as little geometrical regularity as are the other motives, but are freely executed with strokes of the brush following the curves of the The broad lines are often scolloped at the edges, more or less like a saw, and this has been called by Professor Andersson the "death motive," because it occurs only on the tomb vessels. He considers that these serrations may have a symbolic meaning, as the vessels on which they occur were found exclusively in the tombs. Whatever their significance or origin may be, it is evident that they play an important rôle in the ornamentation of the period. It should be mentioned that among the objects which may be referred to this group, there occur also a couple of jar lids, of which the knobs are modelled in the form of human heads—the earliest anthropomorphic representations known in China.

The pottery dug up at Yang-shao ts'un, Ho-yin hsien and other sites in Honan is, indeed, closely related to the above-mentioned Kansu pottery, but it appears both artistically and technically to stand on a somewhat higher plane. The material is finer, the shapes are more elegant, and the decoration is more distinguished than in most of the jars from Kansu.

It includes a number of cups and flat bowls of finer clay which sometimes is quite well baked, by which process it has taken on a dark reddish hue. In other instances

this brownish red colour is limited to the upper rim of the vessel, while the main body is grey, a distinction of colours which, as Professor Andersson has pointed out, possibly was obtained not by painting, but by covering up the vessel in part with sand, when it was baked.

Some of these specimens from Honan are also covered with a white slip on which ornaments in darker colour have been painted or rather in some instances spared out, i.e. the white standing out as an ornament against the black. Such is, for instance, the case with the elliptical patterns which may be derived from the cowrie shell, and some of the freer, horn-like patterns. The designs are here altogether of a more refined nature than on the specimens from Kansu and they show a richer combination of colours, as may be seen particularly on the fragments from Ho-yin hsien (Plate 3). The potteries dug up at Yang-shao ts'un are mostly of a greyish tone with paintings in reddish brown, and their ornaments are also of a more refined, not to say sophisticated, kind, reflecting an artistic culture which evidently was superior to the general level of the contemporary pottery in Kansu. But unfortunately most of these domestic vessels are only preserved in fragments, which renders difficult a proper conception of their artistic importance.

Beside these painted vessels there were found at Ho-yin-hsien and other sites in Honan, a number of unpainted grey-black vessels, including li and ting tripods with imprinted or scratched "mat pattern," of a similar kind to those which may be seen on vessels of the Chou period, which thus seem to form a link with the historic pottery of China and testify to a continuity of development which would be difficult to establish with the help of the Kansu pottery alone (Plate 4). In this the tripod forms are very rare and do not occur, so far as we are able to judge from the material now exhibited, until the so-called fourth period. The inner relation between the pottery from Honan and from Kansu thus presents a problem difficult of solution, and grounds are not lacking to indicate that they were executed by peoples on somewhat different levels of civilization and with different cultural traditions. In any case it seems clear that the real Yang-shao pottery (from Honan) constitutes a more direct preliminary to the later art of China than do the works from the north-western corner of the country.

Group III is largely composed of purchased vessels, but the same kind of pottery has also been encountered in tombs in Ma-ch'ang-yen, after which place the group is designated. Stylistically this group would appear rather to constitute a decadent continuation of the previous group. The forms are partly similar, though not quite so broad and thick-set as in Group II. The larger jars become more ovoid or pear-shaped; the greatest swelling is nearer the neck, which becomes more and more insignificant, the handles become more stunted and are placed lower down (Plate 5). The ornamentation, it is true, still consists largely of a combination of wave patterns, festoons, circles, etc., but the energetic spirals are missing. We notice instead a kind of sharply broken lines or pointed festoons often terminating in finger-like ramifications, which may possibly be explained as a coarsened rudiment of the above-mentioned "death motive." The execution is in general much more careless,

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the colouring fainter and the ware itself coarser than in the previous groups. It would seem as if the artists in this work had lost a great deal of the technical refinement and purity of form which is to be found in many examples of Group II. They were active at a later date, when the original impulses had to some extent faded, though still in a neolithic age, since objects of metal are just as much lacking in these graves as in those of the second period.

Group IV, together with Group II, is the most significant of the whole series. The finds are especially numerous and are conspicuous by a stylistic character which definitely separates them from the rest of this early pottery. The group derives its name from the site of the excavations at Hsin-tien, though numerous similar objects have been found in other places, as for example in the dwellings at Hui-tsui, where a number of copper articles (including a knife) were found. For this reason, and with the support of stratigraphical evidence, the conclusion may be drawn that these vessels belong to a later period than the Yang-shao pottery. If we follow the above-mentioned chronological scheme, we are led to the assumption that this so-called Hsin-tien pottery may be dated about 2000 B.C. or shortly before.

If we look at the most beautiful and characteristic vessels in this group, we cannot help being struck by their relatively severe forms, so completely unlike those which predominated in the Yang-shao pottery. The most distinguished and characteristic specimens bear witness to an influence from metallic shapes, though it is uncertain whether this influence made itself felt in China or in some more westerly country, where these forms were possibly first developed. The contours are tense, the hip lines sharply defined, the neck curves sometimes quite elegantly turned (Plate 6). The majority of these vessels are also provided with large handles; they remind us sometimes of classical amphoræ with a conical tapering lower part and flat shoulders. Side by side with this type there appear, however, several simpler varieties, less pure in style, as, for instance, small cups on round feet, and lower, bowl-shaped vessels with large handles.

The decoration is executed in black, applied either direct to the poorly baked reddish yellow clay or to a greyish white slip, which appears to have been produced by dipping the vessel in a solution of chalky mud. Among the most typical designs may be mentioned the meander, usually executed on a large scale and very elongated, as a border ornament round the neck, and the long hook-shaped arms which converge in obtuse angles and are framed by horizontal lines in a kind of border on the upper part of the vessels. Occasionally these arms hang straight down like long hooks, but more frequently the lower part of the vessel is divided by simple straight or undulating vertical lines. Interspersed among these very stereotyped geometrical patterns one sometimes finds highly conventionalized human and animal figures, which like the meander ornamentation, lead one in thought to the Mediterranean world—Thessaly and southern Italy—parallels, however, which should not be interpreted as evidence of any direct connection.

Group V consists mainly of vessels excavated at Ssu-wa-shan in Ti-tao hsien,

but the excavations made in tombs at Ch'ia-yao in Hsi-ning hsien have also been referred to the same group. Among the latter were found a number of smaller ornaments and implements in copper. The prevailing form in this group appears to be an open crock or jar with a short neck and a wide opening, which is curved into a kind of saddle shape. The foot tapers considerably (Plate 7 A, B). All these vessels are devoid of decoration and are made of a somewhat coarse, unwashed clay, but some of them are well worked, with thin walls and a certain elegance of form, which seems to point to metallic prototypes. In this respect they are undoubtedly related to the pottery of the previous group, although the shapes of the vessels are very different and, generally speaking, of a later type. They have acquired a certain uniformity, not to say stiffness, which is not to be found in the earlier groups, though at the same time there appear here also li tripods of the usual Chinese type, a fact which may perhaps be interpreted as an indication that a more homogeneous Chinese culture had begun to develop at this period.

Group VI, which comprises numerous excavated vessels both from dwelling places and from tombs, is called after the place Sha-ching in Chên-fan hsien, which is situated at a considerable distance from the other fields of excavation, nearer to the edge of the desert. It is a remarkably simple rustic pottery, evidently made by a population which stood on a low level of civilization and probably had little in common with the peoples who created the earlier ceramic groups. It consists principally of jars and jugs of thick and coarse material, sometimes more reminiscent of ordinary brick than of real pottery (Plate 7 D, E). Some of these vessels, however, are decorated with painted borders composed of suspended triangular tips or points. sometimes combined with rows of vertical arrow points or of conventionalized birds. Sometimes the borders consist simply of close vertical dashes between continuous horizontal lines. The execution is usually quite poor, but the regularly geometrical character of the ornamentation is well emphasized and sometimes reminds us of the so-called proto-Corinthian pottery, which was manufactured in such great quantities in the seventh and sixth centuries B.C. and exported over the whole of the eastern Mediterranean littoral. Specimens of this pottery have been dug up in Egypt; possibly it even penetrated into Iranian territory and sent its offshoots from there into eastern Asia. In any case it is difficult to believe that this pottery was earlier than the seventh or sixth centuries (it may rather have been later), and it seems that it was a relatively isolated phenomenon, maintained by a primitive race outside the boundaries of China, without any palpable stylistic connection with either earlier or later ceramic wares in this part of the world.

From a formal and technical point of view the works of this last group are, indeed, the most primitive in the whole long series of "prehistoric pottery," a fact which may well be said to indicate that the most characteristic products of this prehistoric pottery do not represent any real initial stage. They cannot be explained without assuming a long previous development, and this has in all probability taken place for the greater part further west than China.

It is beyond our purpose to enter here into a further discussion of this question

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of origins, which, moreover, extends across the whole of Asia. The western Asiatic phenomena parallel to the pottery excavated in China are indisputable and have been adduced as the principal evidence in dating the latter. Certain ceramic products of the second period in Susa and of Anau have been advanced as corresponding most closely to the pottery of, especially, Yang-shao. (For our part, we are unable to find any essential resemblance between Susa and the Kansu pottery.) As parallel phenomena to the neolithic pottery of China may also be mentioned the Sumerian discoveries at Tell al'Ubaid and Assur, which in all probability lie still further back in time.<sup>1</sup>

The question arises whether successive waves of cultural and artistic influence did not reach China from these regions. They were of course modified during the long journey towards the Far East and by coalescing with other stylistic elements, but it appears almost beyond dispute that this neolithic pottery had achieved considerable developments before it reached (as far as) China. It is possible that in the later groups of prehistoric Chinese pottery we may also assume some indirect influence from the Ionian world, which, as we know, on various occasions fertilized the art of further Asia, but a closer determination of such influences is hardly possible until more of the Chinese material has been made accessible for study.

From the point of view of the history of art this early Chinese pottery must therefore be said to constitute the final link in a long chain of development, which may be followed through the western, just as much as through the eastern, Asiatic provinces of art. Even if we might assume that the latest stylistic groups had survived into historical times, yet there would still be no real continuity between this pottery and the later "classical" Chinese art. One may indeed observe certain transitional forms, as well as characteristically Chinese models, side by side with the more foreign types, but this proves nothing more than a gradual assimilation and refusion of the western Asiatic impulses. Moreover, the contrasts are most pronounced in the ornamentation, which, from the point of view of the history of art, offers the most articulate evidence. The singularly rich and varied motives which impart to this prehistoric pottery such a pronounced and unusually decorative character, are completely lost at the beginning of historical times. These motives do not appear to have struck any deep roots in the creative imagination of the Chinese; in their

<sup>1</sup> Cf. T. J. Arne, Painted Stone Age Pottery from the Province of Honan, China, Peking, 1925, p. 17 sqq.; J. G. Andersson, An Early Chinese Culture, Peking, 1923, p. 52 sqq.; J. G. Andersson, Preliminary Report, etc., Peking, 1925, p. 41 sqq.; H. Frankfort, Studies in Early Pottery of the Near East, London, 1924; Hubert Schmidt, Prähistorisches aus Ostasien, Ztschft. für Ethnologie, 1924, 5–6. Herr Schmidt rejects the parallelism between the Yang-shao and the Susa and Anau pottery and considers that the former has greater resemblances to discoveries at Cucuteni in Roumania and Tripolje in southern Russia. "The Yang-shao culture of central China must be regarded as the most easterly offshoot of the Tripolje-Cucuteni culture of the Danube-Balkan region. A similar southern offshoot of the same culture appears in the painted pottery of eastern Thessaly by which the considerably more eastern and wholly different Anau-Susa culture is covered up." He draws the full conclusions from these considerations and designates the Yang-shao culture as not of Chinese, but of European origin.

place there appear others of a more zoömorphic character, especially in the bronzes which were made for ritualistic purposes, though also in other vessels and objects (in clay, metal and bone) which were used at the sacrifices to the ancestors and deposited in the tombs. These are clearly the product of a different cultural development, springing out of religious and racial traditions which had little in common with the fundamental conditions of China's prehistoric art.

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For the present the prehistoric period in China may be reckoned until about 1000 B.C., and we are in possession of no other reliable sources of information concerning the history of this remote age than the above-mentioned archæological discoveries. The accounts of the Chinese chroniclers of the reigns of the rulers are later compositions, of greater importance for a knowledge of the time when they were recorded than of the period which they purport to describe. It is only with the Yin dynasty, which derives its name from the place in northern Honan where its capital was situated, that we enter upon more solid historical ground and acquire definite knowledge of a line of kings who probably reigned in the 12th and 11th centuries. The names of these kings occur in inscriptions on bone and tortoise-shell which have been dug up in considerable quantities on the spot (near Chêng-ting-fu in northern Honan) where the city of Yin was situated and which is nowadays partly covered by the village of Hsiao-t'un in An-yang hsien. The majority of these inscribed objects have served divinatory purposes. The sacrificant or the suppliant scratched a certain question on a piece of bone or tortoise-shell, provided with small round holes: when this was held over a fire, there appeared lines and cracks which might assume a certain similarity with written characters, and these were interpreted by augurs or priests, who thus announced the answer of the divinity. From these questions, which relate to harvests and rainfall, hunting and fishing, breeding of sheep, pigs and domestic animals, wars and administration, etc., we can derive certain conceptions of the simple agricultural and social conditions and of the administrative system which prevailed in the China of that day. Thus, for example, it was the personal duty of the king to examine all sacrificial beasts: when breeding time approached, he put to the divinity the question: "Will the young be male or female?" More frequently, however, the royal question concerns the rainfall or the millet harvest, as being of the greatest importance for the peace and prosperity of the kingdom. There are, however, a number of inscriptions which are not divinatory questions, but simply a record of the answers of the augurs or similar pronouncements. The Chinese archæologist, Lo Chen-yü, who has published several of these, considers that the flat bones were used at that time in the same way as slabs of wood and bamboo were used in later times, especially for the recording of important

There are no dates amongst these inscriptions, but in view of the fairly precise genealogical records which the descendants of the Yin kings prepared, one may assume that the inscribed objects found at Hsiao-t'un date from the beginning of the first millennium B.C., i.e. from the reign of the two last of the Yin kings. There is in existence no exact chronology for this early period, but the above calculation agrees very closely with the information contained in the so-called Bamboo-Annals, which are nowadays credited with greater historical value than Shu ching and other

popular writings which are based on Pan Ku's somewhat free and archaizing chronology.1

It is, however, not the inscribed bones and tortoise-shells which primarily interest us in this connection, but rather certain objects found on the spot and made of bone, horn, ivory, stone and clay, which are adorned with ornaments, either engraved or carved in relief. Many of these have a very pronounced artistic character and they have in addition a special significance owing to the fact that they are the earliest Chinese objects with ornaments of the "classical" zoomorphic type which can be approximately dated. They constitute therefore in respect of style and motive a terminus a quo for the study of the earlier Chinese ornamentation. It is reported that a series of bronze vessels was also excavated here during the Sung period, but unhappily more precise information concerning their appearance is missing. For the present we only know of a smaller bronze fragment with turquoise inlay, from Hsiao-t'un. It should also be added that our knowledge of these articles is not based on any methodical research or excavations, but upon the accounts which have been collected and published by the Chinese archæologist Lo Chen-yü, who, partly by the agents he sent out and partly by visits to the place in person, collected a number of articles from Hsiao-t'un, which he has illustrated and explained in a publication called Yin-hsiu-ku-ch'i-wu-t'u-lu (1916) and has referred to in a number of publications, which, however, are mainly devoted to the archaic inscriptions. These objects from the Lo Chen-yü collection are at present for the most part in the East Asiatic Collections in Stockholm, but in addition there is a considerable number of carved bone objects dispersed in private and public collections in Japan, France and America, and it is usually stated that they are from the same place, a statement which, at least in many cases, is not contradicted by their stylistic and technical resemblances. We must here restrict ourselves to the mention of a few specimens.

The majority of these carved bone articles have come down to us in a fragmentary condition, which renders difficult a precise determination of their function. They are usually of elongated shape and more or less curved (as a natural consequence of the material) but there are some which clearly have the form of handles or handle knobs (Plates 8 and 9). Lo Chen-yü explains that some of these are handles for so-called shu-pi, a kind of long implement with which the sacrificial meat was extracted from the vessel. He illustrates such a very fine shu-pi handle and others may be seen in the East Asiatic Collections in Stockholm. Still more common are fragments of long, flat, usually somewhat convex, objects, which taper towards the middle and expand towards the ends like a spoon handle. These were called ssũ-pi and they were also used to extract the sacrificial food from the vessel or to stir the sacrificial wine. They differed from the shu-pi in that they were not furnished with points at the end but with flat somewhat hollowed blades, as appears also from the objects reproduced on Plates 8 and 9, in which blade and handle are in one. In

<sup>&</sup>lt;sup>1</sup> Cf. E. Chavannes, Les Mémoires historiques de Se-ma Ts'ien (Paris, 1895), p. 102 sqq.; H. Maspero, La Chine antique (Paris, 1927), p. 37 sqq. The latter work also contains an exhaustive bibliography regarding the Yin inscriptions.

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other cases the blade (of wood or metal?) was probably added. They occur in many different sizes, owing to their varied functions both for solid and liquid food, and they may be described as a sort of ritualistic table implements in common use at meals in connection with the sacrificial ceremonies.

Besides these ritualistic objects there are those which had an ornamental or practical function in dress, especially the so-called ping, a kind of large ornamental pin which served to secure the strings to the high cap (Plate 10). The Emperor used ping of jade and a red string, the princes ping of jade with a black string, the vassal princes ping of ivory and a dark string. Lo Chen-yü also illustrates combs, arrow heads and coins of bone, as well as larger flat pieces which served either as inscription tablets or as musical instruments, i.e. a sort of gong, which was probably suspended in a wooden frame, like the later gongs of jade and bronze. The material from which these and similar articles were made was partly bone (buffalo or cattle), partly rhinoceros horn and partly ivory. It may, indeed, be taken as a proved fact, that elephants then existed in central China.

If we examine more closely the ornaments engraved or carved on these objects, we shall find that they comprise the same motives as are typical of the whole of the classical bronze art of the Chou period, i.e. the dragon (lung), the t'ao t'ie head, ch'an wên (the cicada ornament), k'uei wên (a dragon-like monster with a snout or bird's beak), p'an k'uei (coiled k'uei), and lei wên (thunder clouds conventionalized in meander shape). One or more of these motives reoccurs in all the more important objects of this group, and in some examples the larger and deeper carvings are inlaid with turquoise (Plates 11, 12). The technique is very precise and delicate, and when the inlays were fully preserved, the effect of these bone mosaics must have been particularly refined.

The ornamentation is by preference rectilinear and might, indeed, first have been developed for carving in wood. Curiously enough, it is also retained almost unchanged when the same motives are applied to bronze vessels, though the relief was usually made deeper and the ornaments were often arranged in two or more layers. Bronze vessels were, no doubt, made at the same time as these bone implements, yet the conventionalization of the ornamental motives was evidently first determined by the carving technique, and it is probable that at an early stage wood was used just as well as clay and bone for the ritualistic objects. These wooden implements and wooden vessels have, however, for obvious reasons been completely lost, but their existence is suggested by the style of ornamentation on later objects in bronze.

Among the largest and most remarkable carved objects in bone are a couple of handles (shu-pi?) terminating in a dragon head, one in the collection of H.R.H. the Crown Prince of Sweden [formerly belonging to Mr. Lo Chên-yü] (Plate 12), and the other in the Museum in Toronto (Plate 13). The form of the head is not specially emphasized, but the dragon nevertheless has the strong, almost violent character of a beast of prey, with its wide-open jaws, its great fangs and round protruding eyes. For the rest it is ornamented by a kind of fluted band in relief,

which also covers the neck where it is drawn into a kind of irregular spiral pattern. A transverse border, composed of lancet ornaments with t'ao t'ie heads, is used as a finishing motive at the opposite end. It would be difficult to point to an ornamental animal sculpture with greater completeness of expression.

Among the most important carvings in ivory should be mentioned a t'ao t'ie mask belonging to the Oriental Collections in the Louvre (Plate 14 B). It is reminiscent of motives of a similar kind on early Chou bronze vessels, and derives its character primarily from the large round eyes, the curled nostrils and the long tentacles (or bands) over the extremely sharp rows of teeth on both sides. Between the parts thus emphasized in relief the ground is covered by a lei-wên pattern. The mask was evidently affixed to some kind of framework. But what kind? Perhaps to some larger vessel of wood, or to some other ritual object. Stylistically it forms a connecting link between the sculptured bone objects and some of the t'ao t'ie masks on bronze vessels usually ascribed to the Chou period, yet we have no absolute means of deciding whether it was executed at the end of the Yin or at the beginning of the Chou dynasty, even though it materially belongs to the same group as the carved bones from Hsiao-t'un.

At the same place a number of small decorative stone sculptures have also been found, which now may be seen in the East Asiatic Collections in Stockholm (Plates 14 A, 15). They probably served as handles or ornaments on large vessels or sacrificial implements, and they might just as well have been executed in bone as in marble. The most significant example is a two-sided ram's head passing over into a gently curved conventional neck, which, to judge by a raised edge on its back, was secured to a wooden support. The head attracts us by its sensitive modelling, its combination of a keen observation of nature and a strict decorative stylization. In this respect it reminds us of a number of rams' heads in bronze which are traditionally ascribed to the Chou period.

The same style and mode of conventionalization appears in some rams' heads executed in relief on convex stone slabs, which may have been attached to large They are all characterized by a perfect unification of form, a geometrical stylization of the nostrils, the eyes and the ears, and by certain framing ornaments representing animals in an abstract linear form. The plastic expressiveness, especially in the first-mentioned head, might be taken as a reason for referring these stone objects to the province of sculpture rather than to that of ornamental decoration. They constitute evidence that at the end of the Yin dynasty, about 1000 years B.C., an artistic sureness had been achieved in the application of animal motives to decorative purposes which was scarcely surpassed even in the Chou period. If it were objected that they should more probably be dated later, it may be answered, firstly, that Lo Chen-yü's statements have in general proved well founded, and, secondly, that the thin relief ornaments, which also occur on these animal sculptures, are completely identical with those which adorn, for example, the large bone plates (gongs) from Hsiao-t'un. The resemblances in style are to us so convincing that we cannot find any reason to doubt that the objects are contemporary.

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The bronzes which may with the greatest probability be ascribed to the end of the Yin period are also executed in a manner which reminds us directly of the carved bones. First among these may be recalled a fragment of a large handle or grip which was reproduced by Lo Chen-yü in his above-mentioned publication and which is now in the East Asiatic Collections in Stockholm (Plate 16 A). It is a flat double-sided object, ornamented on both sides with a kind of coiled dragon pattern, consisting of thin walls or bands and between them grooves which are (or were) filled with small bits of turquoise. These grooves or channels are, it is true, of a more regular linear character than the carved ornaments on the bone handles, but the technical method is nevertheless in the main the same, especially as regards the incrustation with turquoise.

Another more complete object of the same kind is to be found in the collection of M. Alphonse Kahn in Paris (Plate 16 B). It represents a dragon with the body bent into a semi-circle and a great head with open jaws, in which appear large fangs, thus closely resembling the above-mentioned dragon heads sculptured in bone. But instead of the carved flutings which constitute the ornament of the bone handles, this flat bronze object is decorated with a turquoise mosaic, executed in the same manner as was employed on the bronze fragment from Lo Chen-yü's collection. The incrustation has in part been lost and the object is considerably damaged, but it may nevertheless serve to give an idea of the magnificent effect of these inlaid bronzes and of the technical precision with which they were executed.

To the same group belong a number of daggers and short weapons with a jade blade and bronze handle with turquoise inlay. Specimens of these are to be found in the Louvre as well as in private collections in England and France (Plate 17). The ornamental motives on the handles are mostly t'ao t'ie masks, designed in a strictly linear fashion by means of thin bands or walls, between which the turquoises are fixed. This technique seems preferably to have been applied to minor sacrificial implements, weapons and ornaments (Plate 18), but not to vessels or larger objects with curved surfaces. At any rate we do not as yet know of any such early bronze vessels with traces of turquoise inlay.

On the other hand there are some larger bronzes on which the highly conventionalized linear ornamentation is rendered with thin bands or walls of a similar kind as we have observed in the above-described smaller articles. As an example we may refer to a most original vessel in the Berlin Museum, which both in ornamentation and form bears evidence of archaic origin (Plate 19). It is a kind of li tripod, though not of the usual shape, for it almost lacks any bowl. The feet are strongly developed and pass into a broad neck, emphasized by an ornamental band and terminating in a flat brim, over which there is an arched dome with a fairly large hole and a vertically inclined pipe and two round knobs. How this mysterious composition is to be interpreted is still an unsolved problem. It has been supposed that it has a sexual significance, possibly a sort of symbolic anthropomorphization of Yin and Yang, the two great forces pervading all nature.

In connection with the carved bone objects from Hsiao-t'un there have sometimes

been mentioned some fragments of a white ceramic ware of which the best specimens are to be seen in the East Asiatic Collections in Stockholm, in the Museum of the Kyoto Imperial University (Plate 20), in the Historical Museum in Peking, and in the Museum at Seoul. The specimens which are now in Stockholm were acquired by the author (1922) from Mr. Lo Chen-yü in Tientsin, and the same well-known authority has also furnished most of the pieces now in Kyoto but others have been brought from China by a Japanese dealer. According to the information of Mr. Lo Chen-yü, these fragments of white pottery were found at the same site as the carved and inscribed bones and they may consequently be mentioned here, though from a stylistic point of view they are more closely allied to the Chou bronze vessels. The ornamental motives with which they are decorated are, as we shall see, largely the same as those on some of the Chou bronzes. Professor K. Hamada, who has discussed the Kyoto fragments in two articles, accepts the statement of Mr. Lo Chen-yü as to their provenance and age, and explains these products of white pottery as "objets de luxe made for ceremonial purposes or for special classes of people," and holds that "they existed side by side with the rude blackish brown ware in pre-Han periods."1

The explanation expressed by Professor Hamada seems indeed quite plausible, though it is difficult to reach a full idea about the use and character of this white pottery until some more important fragments or complete vessels have been found. The largest piece now in Stockholm evidently belonged to a vase with cylindrical body, sharply angular shoulders, contracted neck and spreading mouth. Its full height may have been from 26 to 29 cm.; its diameter was about 15 cm. and the ware had a thickness varying from  $\frac{1}{2}$  to  $\frac{3}{4}$  of a cm. The other fragments in Stockholm and Kyoto which I have had occasion to examine may well have formed parts of similar vessels which, as appears from the above indications, do not reproduce shapes known to us in bronze. The high cylindrical jar or vase is a type rather used in pottery than in bronze.

Whatever the shapes may have been, it is evident that the ornamentation consisted of motives quite similar to those which appear on some Chou bronzes, i.e. elongated meanders or angular spirals enclosed by ribbon-like dragons, or simply of bands forming a pointed wave pattern. In the upper border may be observed t'ao t'ie masks and k'uei lung; the curving neck is decorated with a row of triangular cicadas. All these ornaments are brought out with great sharpness, just as on the bronzes. It is possible that they were produced by pressing the vessel in a mould but certain parts show evident traces of sharp instruments by which they have been worked over

<sup>&</sup>lt;sup>1</sup> Cf. Kosaku Hamada, an article in Japanese in Kokka, Dec. 1921. Same: Engraved Ivory and Pottery found at the site of the Yin capital. Memoirs of the Research Department of the Toyo Bunko, No. 1. Tokyo, 1926.

The quality and tone of the white pottery fragments vary to some extent. The best specimens are very hard, well burnt and of pure white colour; others are of a softer ware, less baked and not so white in tone. One piece in the Seoul Museum is almost brick-coloured. It may be that this kind of pottery gradually decayed in quality as bronzes became more generally used for ceremonial purposes.

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before the vessel was baked. The rectilinear motives as well as the manner of execution may perhaps be taken as indications that this kind of ornamentation was developed for the technique of carving before it was produced by casting. The earliest vessels may, indeed, have been in wood. The material of the fragments in Stockholm is a very fine clay which is creamy white on the surface where it is hardest burned, but somewhat rosy in its core which is less hardened by fire.

The general stylistic character of this white pottery is, indeed, closely akin to a certain class of bronzes which usually are considered as belonging to the Chou period, though some of them may have been made earlier. Therefore it has been supposed that the white pottery vessels served as matrices from which moulds were taken to be used for casting bronzes¹ but this supposition is not supported by the shape of the vessel mentioned above. A safe conclusion as to their use is, however, hardly possible until we know more about their shapes, frequency and composition. Stylistically they form a kind of intermediary group between the carved bones from Hsiao-t'un and the early bronze vessels, and they represent a class of artistic pottery which, even if it was made in the Chou period, reflects earlier traditions of style.

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The ornamentation of the objects in bone and bronze, which may be ascribed to the time about 1000 B.C., is on the whole characterized by a remarkable combination of strictness (not to say severity) and refinement. The linear emphasis is carried very far, the definition of all details is sharp and clear, but the ornamentation is comparatively flat, without the plastic relief and somewhat turbulent energy that predominate in the decoration of most of the typical Chou bronzes. Much of the decoration is inlaid or engraved rather than worked in relief, so that the objects retain a more complete and unbroken surface than is to be found in the somewhat later vessels and ornaments of bronze.

<sup>1</sup> Cf. Hamada, op. cit.

#### EXCURSUS ON THE DECORATIVE MOTIVES

It may not be without interest to add here a word or two about the significance and origin of the ornamental motives which we have noticed on the bone and bronze objects described above and which will be seen more fully developed on the ritual vessels of the Chou period. We can, however, only offer a brief statement of the interpretations which seem to us most probable; the subject lies largely outside the limits of the history of art and the explanations are as yet of a hypothetical nature.

The simplest and commonest ground ornament on ritual objects is the so-called lei wên, the rain or thunder cloud pattern, which is usually executed in the form of meander-like spirals. A. von Rosthorn claims that it is derived from the oldest written Chinese character for such phenomena, which might be possible if the cloud was symbolized by a spiral line and thunder by a pair of concentric circles or of squares.¹ Their use on ritual objects of bone or bronze may have been due to the fact that sacrificial ceremonies were performed in order to induce rainfall or a good harvest. We hardly need to go outside Chinese sources for the origin of these, nor need we do so in the case of the simple band and linear ornaments, which must as a rule be regarded as springing up spontaneously in more or less direct connection with the form and character of the object.

As regards the conventional animal motives, the majority of them have a very remote connection with actual animal forms. They may be a combination of elements observed in nature, but they have been re-composed into ornamental motives and, curiously enough, they are most freely treated in the earliest specimens of decorative art in China. Later on, in the Chin and Han periods, they assume more natural zoömorphic forms, a circumstance which may be interpreted as evidence that these motives had passed through a certain artistic development before the time when we find them adopted.

The least fantastic, and consequently zoömorphically the most easily recognizable, of these decorative animal motives is the cicada, ch'an wen, which is rendered in a recognizable manner, even though it is often designed in triangular or lancet form when used as a border ornament round the neck of the vessel. The cicada had, moreover, a well-defined and well-known symbolic meaning: it was to the Chinese, as to the Greeks, a symbol of rebirth (metaphorically represented by the successive appearance of the larvæ, the pupæ and the winged insects). For the same reason, cicada-shaped objects of jade were placed in the mouths of the dead when they were interred. Particularly fantastic and variable are the strange beasts which pass under the name of k'uei. In modern dictionaries the word is translated by "one-footed monster," but on the old bronzes there occur both one-footed and many-footed k'uei. In addition there are some with fins or spikes on their backs; the body may be long or short, but usually terminates in a coiled tail. The head is often snout-shaped,

<sup>&</sup>lt;sup>1</sup> Cf. A. von Rosthorn, Altchinesische Bronzen. Wiener Beiträge, 1926, p. 18. Where such archaic characters are to be found is not indicated by the author. The earliest form for the character lei (thunder) known to us consists of three crossed squares.

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but there are also so-called k'uei fêng which are provided with bird heads. More common, however, are the so-called k'uei lung, which, as the name indicates, are related to the dragons; it appears to be this form also which gradually gained the upper hand and became more and more dragon-like. The Chinese also know other dragon-like beasts, for instance li, the salamander (which does not, however, so far as I have been able to discover, appear on the archaic bronzes and bone objects), and ch'iu, a snake-like creeping beast, which is often represented in the form of an elongated recumbent S. As is well known, the dragon was according to Chinese conceptions a symbol of the fertilizing rain, a creature whose element was mist and cloud, and whose appearance was regarded as a blessing from heaven, an omen of a rich harvest and of prosperity, to say nothing of more abstract moral blessings. It is possible the k'uei had a similar significance, although we have no exact information on the subject. In any case, it is a very common motive in the older bronzes. and it should be noted that it is often used as in heraldry, i.e. two k'uei placed strictly opposite each other. Their very fantastic and abstract character indicates ancient ancestry.

The most important and most common of all these zoomorphic motives is, however, the t'ao t'ie; in fact, it is seldom missing from ritual objects and sacrificial vessels. The name is usually translated by "glutton" or the like, but no genuine philological explanation of the word would appear to have been advanced. It is possible that it is of foreign origin, as also the motive itself may be, although it developed into something thoroughly Chinese and acquired a more general symbolic meaning after it became a standing motive on the sacrificial vessels. But it seems to us that the explanations that it is a warning against greed and intemperance or that it represents the god of storm or thunder, though often combined with lei wên, show traces of being later interpretations. More interesting is Hirth's and von Rosthorn's observation that t'ao t'ie was the name of one of the four wild men who were driven out by the Emperor Shun into the mountains beyond the frontiers, as also the name of a wild tribe on the south-west frontier, where men were reported to have hairy bodies and pigs' snouts.<sup>2</sup> In any case it would appear that the name came to be used for wild, untamed creatures of a half-animal, half-human nature. It is certain that these t'ao t'ie heads, whether reminiscent of tigers, wild goats, or of more human monsters, must have been regarded as awe-inspiring, just like the ancient gorgon masks.

A real explanation of this mythological riddle is scarcely possible without inscriptions or documents, but the motive may be elucidated by a comparison of the Chinese t'ao t'ie masks with similar representations in other countries and spheres of art. We are not thinking of the classical gorgons, with which the Chinese t'ao t'ie have no resemblance in type, but rather we would recall Indian and Javanese art in the so-called Kirtimukha masks, which sometimes show a general resemblance to t'ao

<sup>1</sup> Cf. W. Perceval Yetts, Chinese Bronzes, London, 1925, p. 13.

<sup>&</sup>lt;sup>2</sup> F. Hirth, The Ancient History of China, New York, 1923, p. 85.; A. von Rosthorn, Altchinesische Bronzen, Wiener Beiträge, 1926, p. 19.

tie. Kirtimukha was originally a kind of terrifying emanation of Shiva, doomed by the god to eat up its own limbs, but it is used in later times mainly as a decorative device on Shivaite temples. No archaic Kirtimukha masks are known in Indian art and those of the Middle Ages, which are very common indeed, have a rather baroque character, which makes them more akin to later Chinese t'ao t'ie, as for instance, those of the T'ang period.<sup>1</sup>

More surprising are the resemblances between the Chinese t'ao t'ie masks and certain representations of animal-like or demonic human heads in Mexican and Central American monuments. Such motives are indeed very common both in larger stelæ and in articles of pottery and mosaics from Guatemala (Quirigua), Honduras and southern Mexico, of which some are attributed to Maya art and others to the art of the Zapotecs and Aztecs (Plate 21). I would mention as an example on a small scale a clay jar on three feet in the Peabody Museum in Cambridge, Mass., which was dug up from the ruins of Quichè, in Guatemala, a centre of Maya art. It is cylindrical in form, 14 cm. high, and made out of slightly fired reddish material. The decoration is limited to a rectangular field within which appears a head mask surrounded by ornamental bands, rolled up in spirals. These bands issue both from the eyes and the jaws; in the latter there also appears a pair of large tusks.

There exist in several American museums (in New York, Philadelphia, Cambridge, etc.) other vases made of stone which are also provided with facial masks, besides spirals or conventionalized wave patterns. They sometimes bear a striking resemblance to Chinese jade vases with similar patterns. Still more frequent are, however, the monster faces on architectural monuments of a somewhat later date at Copan and Palenque and other places in southern Mexico.

There is no need to enumerate further examples here, because we do not wish to enter into a special discussion of the problem, but simply to point out that motives of a kind similar to the Chinese t'ao t'ie were common even in countries on the other side of the Pacific Ocean. To what extent there may have existed connections between these two spheres of art is a question which cannot for the present be answered. At the moment we know too little of the origin and real antiquity of the old Mexican art. It is of course conceivable that certain motives penetrated from the North to Mexico and that there were communications between Asia and America at a very early stage. Many investigators have adventured such a view, but further research along the Pacific coast is necessary before we can draw any specific conclusions in this matter. In any case it is worth mentioning that many of the motives which predominate in the earlier decorative art of China are also dispersed to some extent in other countries of the Pacific, as also the technique of mosaic inlay, which we have observed in several specimens of the Yin period. It may be that this early Chinese art had its roots further South, but in any case it does not seem to have come from the West or to have derived its main impulses from Asia, as did the neolithic pottery. It indicates both in motive and in style a different origin, and marks the beginning of a new period in the evolution of Far Eastern art.

<sup>&</sup>lt;sup>1</sup> Cf. O. C. Gangoly, A Note on Kirtimukha; Rupam, No. 1, 1920.

# THE CHOU PERIOD

3

#### HISTORICAL REMARKS. THE TOMBS

It is not possible to adduce any definite date for the fall of the house of Yin or the assumption of the royal power by the Chou dynasty, though modern historians seem inclined to believe that it occurred about 1000 B.C. The earliest Chou rulers are also rather misty individuals, wrapped in a halo of legend, from which historical events emerge vaguely. It is only with King Hsiuan (827-782) that historical data become more reliable; his struggles with the Hsien-yün barbarians (a Hunnish tribe) are sung in Shih ching (The Book of Odes) in a manner which bears witness to real contemporary observation. From these accounts it appears, among other things, that the barbarians penetrated into the country and plundered the capital, Hao, situated not far from the modern Sian-fu. Here, in the heart of their old duchy, ruled the Chou kings until the year 771, when King Hsiuan's quite incompetent successor was forced to abdicate and the kingdom was split into a western and an eastern part. With good reason the Chinese historians date a new epoch, not only in the history of the dynasty, but also in that of the country, from the transfer of the royal residence. It was the beginning of the dissolution of the Chou kingdom. The kings from now onward had their seat in Lo-i, near to the modern Honan-fu, and no longer showed themselves in the valley of the Wei, which was finally lost to them between 687 and 640. The regions north of the Yellow River were ceded to the Ch'in dukes in 635, and the kingdom which survived gradually shrank in the course of years until it comprised not more than 72 villages, when the Ch'in dukes finally annexed it about 150 B.C.<sup>1</sup> The political power of the king during the Eastern Chou dynasty was in fact somewhat illusory. That he should nevertheless have retained some authority over the powerful vassals who penetrated more and more into his former domains, was due to the fact that he was not only the supreme ruler but was also invested with the highest spiritual office. From time out of mind he had been a sort of rex-pontifex, a ruling high priest, who alone had the right to perform certain sacrificial rites, and it would appear that his religious rôle became more and more emphasized in proportion as his political influence waned. Meanwhile, the ritual customs, which had remained substantially unchanged for centuries, not to say millenniums, tended at the close of the Chou period to become the empty forms of an animistic natural religion which no longer satisfied the demands of a developing civilization.

This politico-religious development, which led to a more pronounced emphasis on the exceptional ritualistic position of the king and the increased number and power of the vassals, has also its special significance in the history of art, for the more numerous the ritualistic sacrifices and the religious festivals became, the greater was

<sup>&</sup>lt;sup>1</sup> Cf. Maspero, op. cit., p. 81.

the need for appropriate artistically worked vessels and sacrificial implements. According to the ancient law of the ritual of sacrifice which has been preserved for posterity in Li chi (the Book of ritual) and Chou li (the Chou ritual) it was the duty of the reigning monarch to offer sacrifices to Heaven and Earth, to the guardian spirits of the four quarters of the globe, to the sacred mountains and rivers and to certain ancestors. Vassal princes of the first class sacrificed to the guardian spirits of their territories and to certain mountains and rivers within their domains, as well as to the household divinities; they had also the right to sacrifice to five generations of ancestors. Vassal princes of the second class might sacrifice only to the household divinities and to three generations of ancestors. The ordinary paterfamilias in certain social positions might only sacrifice to distinguished ancestors of the preceding generation. He functioned as the religious superior of the family, or rather of the tribe, and based his authority on this fact. The ritual adopted in these different kinds of sacrifices to ancestors and natural divinities was regulated by a number of prescriptions (no less than three hundred such are mentioned) and the purpose of these is said to have been to bring the actions of men into conformity with the laws of nature. In the books of ritual there are also regulations as to the shapes and decoration of the various sacrificial vessels, which likewise have historical significance, even though the regulations, in the form in which they have been preserved for posterity, belong to a somewhat later period than the Chou dynasty. The ritual bronzes are thus by no means the products of a free artistic imagination, but of a cult with a symbolic meaning, intended for practical religious needs. Their artistic import is therefore of collective rather than of individual character; it reflects a creative spirit coloured by animistic and cosmic ideas or conceptions which cannot be represented naturalistically, but only by abstract, highly conventionalized means of expression.

The greater part of the ritual bronze vessels known to-day have been removed from tombs, and we have reason to suppose that a far larger number still remain undisturbed in the earth. It appears to have been the rule to deposit in the graves of important personages certain series of sacrificial vessels, besides weapons, ornaments and household implements, evidently in the belief that the dead might continue his acts of sacrifice in another life. Unfortunately we possess very scanty information concerning the tombs of the Chou period, since no systematic excavations have yet been undertaken. Nevertheless we can observe their outer form, which is not without interest, especially since these immense tombs are the only monuments of this remote age which still remain.

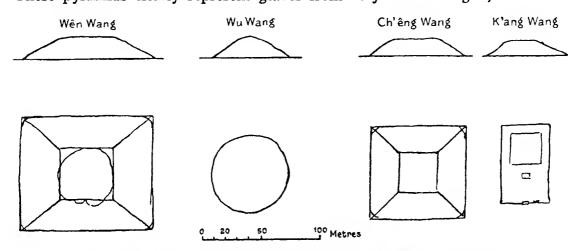
The following notes represent only some impressions of a journey in north-west China.

The locality in which the majority of these princely Chou graves are to be found is a high plateau, a few miles from Hsien-yang, by the river Wei, in central Shensi. Open, bare and treeless and without human habitations, it rises in two broad terraces above the valley of the river and then expands east and west as far as the eye can see.

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The only things which cut the horizon are the burial mounds, some isolated and some in groups, all of the same shape and proportions, though varying in size and condition. The typical prevailing form is a pyramid with truncated top, but since the mounds are constructed simply of earth, and are grass-grown, it is not surprising that the edges of the pyramids are often considerably worn down and that the base line is sometimes ploughed up in the surrounding fields. Many of them in later times have been used as strongholds in the battles which have raged in this district and have been provided with paths and breastworks; others must already in earlier times have been excavated. But this notwithstanding, the pyramidal form is in most cases quite distinct. The dimensions, as has been said, vary. There are some which measure 250 metres square, perhaps even more, but the majority are considerably smaller, some of them scarcely more than 4 to 5 metres square. As a rule they face north, south, east and west.

These pyramids clearly represent graves from very different ages; the earliest



The four earliest Chou tombs. Drawings based on Professor Sekino's measurements.

are reputed to date from the beginning of the Chou period. The great majority originated under the Western Han dynasty (whose capital was situated near Hsien-yang), and in addition the graves of a number of notabilities were raised here in the T'ang and even later ages.

Curiously enough many of the oldest pyramids on the tombs are just as well preserved as those which were erected 1000 or 1500 years later, a circumstance which is difficult to explain, unless we assume thorough restorations of the earliest mounds, in which case we cannot help asking ourselves to what extent these later restorations have modified the original character of the monuments. The memorial tablets with classical inscriptions which occur at several of the early tombs seem as a rule not to be older than Ch'ien Lung's time, when a couple of memorial temples were also erected.

Duke Wu Wang's mound is well furnished with such posthumous distinguishing marks. The pyramid measures about 100 by 120 metres, and is still well preserved, in spite of the fact that Duke Wu is supposed to have died in the 12th century.

Not far away is another pyramid, of about the same size, but in a much worse state of preservation, which is known as Wen Wang's, the first Chou king's resting place (Plate 22 A). Similarly distinguished by inscribed tablets are the stately pyramids which have been raised over the two following Chou kings, Ch'êng Wang and K'ang Wang, as well as over the famous Duke Tan, Ch'êng Wang's teacher and chief minister. All these personalities were, according to Chinese conceptions, of great importance, and it is not surprising that their tombs should have been specially honoured by later generations, but whether the historical responsibility of these generations was as strong as their desire to immortalize the great names is a question which we are unable to answer. Certain it is that Kung ling, as this plateau is called, has gradually acquired the character of being China's classical cemetery.

The interior arrangement of the tombs is a problem which still awaits closer investigation; at this place we can only offer a few general remarks, based upon external observation and on the accounts of eye-witnesses of a couple of graves of the Chou period. As a general rule it may be said that the truncated pyramids are solid earthen mounds, whilst the tombs were built below the level of the ground. In the case of the larger tombs the burial chamber is found in certain cases to be at a considerable distance from the pyramid. This was the case at a tomb situated about 15 kilometres west of Pao-chi hsien, in north-western Shensi, which was excavated in 1901 by command of the viceroy Tuan Fang, whose famous collection of antique bronzes was enriched by a very fine series of twelve vessels, together with a table and half a dozen spoons from this tomb. These bronzes, which now belong to the Metropolitan Museum in New York, will be specially noticed later; for the present I need only relate what was told me concerning the grave by the then postmaster in Sianfu, Mr. E. H. Newman, who visited the spot shortly after the tomb had been opened.

The mound was, as usual, in the shape of a truncated pyramid; near it was found the entrance to an arched passage or tunnel which led into a sinuous path, gradually sloping down to a chamber situated 6 or 7 metres below the ground. The length of this passage was estimated by my informant to be about half a kilometre. The tomb was roughly circular and was covered by an arched roof of brick; the floor was sloping and the diameter estimated at 16 or 17 metres. The large massive coffin was placed by the further wall. On each side of it stood five large bronzes. and at the foot the famous table with its equipment of twelve vessels for wine sacrifice. Along the walls there were also found remains of human skeletons, as evidence that human beings had been immured together with the dead, but unfortunately no closer investigation was made of their kind and number. My informant merely expressed the hypothesis that the dead nobleman or duke had been accompanied to his tomb by a number of wives and servants. This custom was not uncommon in the latter half of the Chou period, particularly in the domain of the Ch'in tribe, as appears, for instance, from the song of the burial of Duke Wu of Ch'in in the year 620 B.C., as well as from the fact that a whole bevy of wives and servants was buried alive

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together with the great Ch'in emperor Shih Huang-ti in the year 210 B.C. The Paochi tomb is also situated in a district ruled by the Ch'in dukes from the middle of the 7th century, and it cannot be dated before this, but rather one or two centuries later, judging by the ornamental style of the bronzes.

Another tomb of the Chou period, containing an even larger number of bronzes, was accidentally discovered in the little town of Hsin-chêng hsien, near Chêng-chou-fu in Honan, in the autumn of 1923. The singularly rich (and mixed) array of bronze vessels, bells, chariot fittings and other ornamental articles (which were later transferred to the provincial capital Kai-fêng) aroused astonishment in wide circles, and an American archæologist, Mr. C. W. Bishop, visited the spot whilst work was in progress, but the tomb chamber had completely fallen in at the time of his visit and its contents of skeletons, etc., had for the most part been dispersed. The excavations were made by local labour without any expert direction whatever, principally with the object of "saving" as much as possible of the gold and bronze objects. Much was destroyed, and no exact notes were ever taken of the internal arrangements of the tomb. Mr. Bishop has related in an article, however, what he saw and heard on the spot, and has drawn certain conclusions which deserve mention here.

The tomb appears to have consisted of a central chamber, probably with a ceiling of wood, from which vaulted passages radiated to the four cardinal points of the compass. It contained both human and animal bones, possibly of two women and one man. Among the animals a small horse was noticed, probably harnessed to a chariot, of which the fittings remained. The bronze vessels and bells were found at different levels, as if they had been set up on shelves. Surprising is the large number of objects found, over one hundred in all, some of the vessels being over one metre high, and richly ornamented with masks and animals both in the round and in relief. It seems as if a whole bronze hoard had been interred with the dead. There was, moreover, also found in this tomb some grey or slightly reddish pottery of a quite primitive type, and, according to local tradition, a number of ornamental jade articles of a rather simple but highly refined type, a statement for which, however, we have no reliable authority.

According to Bishop this tomb dated from the time between 400 and 250 B.C., a date which we can readily accept, especially the later limit. A large part of the bronzes here excavated are decorated with somewhat naturalistically treated animals, as well as with coiling dragons of a type which reminds us of the decorations on bronze objects, nowadays usually referred to the Ch'in dynasty. The tomb may thus have been two or three centuries later than the above-mentioned tomb at Pao-chi in Shensi, where in all probability living men were interred with the dead. It seems to us of special interest, moreover, that it was actually possible to establish that the

<sup>1</sup> Cf. C. W. Bishop, The Bronzes of Hsin-chêng hsien; Annual Report of the Smithsonian Institution, 1926, p. 457. Professor Ma of the Peking National University, who also visited the spot, assures us that there were no traces of a wooden roof nor of any vaulted passages, but simply a cavity in the ground where the bronzes and potteries were found.

Hsin-chêng tomb contained a chariot and a horse, since this observation confirms an assumption concerning a number of Chou tombs which have yielded an abundant harvest of bronze fittings, presumably belonging to wooden carts. It seems indeed to have been a general custom during the Chou period to bury the horses and carts with their owners.

The above-mentioned examples of Chou tombs may suffice; others are less well known. The interior arrangement evidently varied considerably with the different tribes, which inhabited different parts of the country and conserved varying ethnic and religious traditions. Later, when the civilization of the country had become more general, the burial customs and tomb arrangements also became more uniform, as we shall have opportunity to note in studying the tombs of the Han period.

Most famous of all the imperial tombs was that of the great Ch'in emperor, Shih Huang-ti, which may still be seen, though in a somewhat damaged state, at the foot of Li-shan, about 30 kilometres east from Sianfu (Plate 22 c). The vast, truncated pyramid is raised on a terrace measuring over half a kilometre square; the actual base line of the pyramid is about 340 metres square. It is divided into three terraces, but does not rise above a height of 60 metres. The mythical wealth and the ingenious arrangements of the tomb chambers are described in detail by Ssū-ma Ch'ien, the historian of the former Han dynasty, and the same informant tells us that not only the emperor's wives, but also the workmen who had constructed the secret machinery and placed the treasures in the grave, were buried with him.<sup>1</sup>

2

#### POTTERY AND BRONZE VESSELS

The artistic material preserved from the Chou period consists, as has been said, mainly of articles dug up from tombs. The excavations of the Chou tombs have, however, as yet been made without any archæological plans or systematic observa-

According to Ssū-ma Ch'ien the grave was begun in the 29th year of the reign of Shih Huang-ti (217 B.C.) and 700,000 soldiers were employed on it. Digging was carried right down to water level, where a bronze floor was laid, on which the sarcophagus was placed. Palatial rooms and offices were prepared below and filled with jewels and precious articles collected from the imperial palace and from wealthy officials. Expert smiths were commissioned to construct bows, which would release the arrows as soon as anybody sought to enter the tomb. Great water-courses like the Yang-tse, Hoang-ho and the Ocean were made of quicksilver, and the metal was made to flow from one to another by machinery. In the ceiling were represented the constellations of the heavens; on the floor the geographical divisions of the earth. The lights, which were made of walrus fat, were calculated to continue burning for a long period.

#### CHOU POTTERY

tions as to the position, meaning and use of the objects. We are thus, with regard to many of them, thrown back upon hypotheses and assumptions, both concerning their practical use and their relative chronology, and it seems to us a safer method to treat the sacrificial vessels of this long period according to their traditional classification, in typological groups, than to attempt to arrange them in chronological series. We know from literary documents fairly well for what purpose the different kinds of vessels were made, but their relative dates can be established only by a study of the style of ornamentation, because, strictly speaking, none of the inscriptions found on the bronzes of the Chou period contains a reliable date.

Before treating the bronzes it might be well, however, to preface a few words on the pottery of the period. It seems on the whole to reflect a more primitive artistic culture than do the bronzes; it is created within the limitations of the material, without the least influence from the shapes and ornamentation used in the bronze vessels. The predominating types are somewhat full-bodied jars and bowls, as well as li tripods. There are also, it is true, bowls on feet, ting tripods, and a few other special shapes, which might eventually be regarded as influenced by the art of the metal-worker, but they are exceptions, as compared with the usual jar, bowl and vase forms (Plate 23).

As a rule this pottery is made of grey, slightly fired clay, but, according to Bishop's above-mentioned observations, there also occurred a finer reddish ware. Glazes were not employed in the Chou period and painting does not appear to have been common either. Chou pottery represents in this respect a break between the ceramic productions of the neolithic age and those of the Han period. The commonest surface treatment in the (earlier !) pottery jars is the so-called mat pattern, which was produced by wrapping or pressing the moist clay vessel in a straw mat or some similar coarse, woven textile. In some cases such patterns were supplemented or enriched by scratched lines, possibly even produced entirely without pressing the vessel into straw mats. This kind of surface treatment, which occurs as early as the unpainted pottery of the Yang-shao period, was probably developed for practical or technical reasons, and it is naturally confined to vessels modelled by hand, without the use of the potter's wheel or any similar instrument. It is hardly ever missing on the li tripods, which were placed over the fire, and it is quite probable that Professor Andersson is right in his assumption, that this kind of striping or irregular fluting was retained because it was considered more advantageous for the rapid and complete heating of the vessels than the smooth surface. However, it appears also to have been considered beautiful, for it has been transferred in a somewhat improved form to li tripods in bronze.

The greater part of the later and more mature Chou pottery was made, however, on the potter's wheel and shows an even, smooth surface, in which sometimes narrow geometrical borders are impressed with a sharp instrument, or with the finger-nail. In addition there are found on many vessels seal characters which have been imprinted on the wet clay with a wooden die (Plate 23 C). For the rest, it is the

vigorous neck rings, the outward curving brims, and, in rarer cases, the profile of the feet which are the most conspicuous decorative features of this pottery. The majority of these vessels give the impression of articles for daily use, fitted both for the practical needs of the living and for conserving food and drink for the dead.

Compared with the ceramic products of later times, the forms often appear somewhat clumsy, but they have the advantage of being true pottery without any metallic prototypes; in certain cases they also influenced the shapes of the bronze vessels, as is seen most palpably in the case of the typical *li* tripods with their hollow, pointed feet.

Besides ordinary vessels there were also made, towards the end of the Chou period, animals and birds, possibly even human figures, in clay, as, for instance, some quite primitive owls and bears. We do not as yet know for certain whether clay statuettes of human beings (so-called ming ch'i) were placed in the tombs before the end of the Chou period, but as they appear fairly developed at the beginning of the Han dynasty, it seems quite probable that they existed already at an earlier date.

\* \*

The bronzes are for the most part sacrificial vessels, the use of which was determined by tradition and ritual. In Chinese works more than twenty different types are enumerated and their various designations have become well known in the West.<sup>1</sup>

If it is desired to classify them with reference to their practical uses, one may

1 We have not the space here to give a full account of the Chinese works on the old bronzes which have from time to time been published, but we would like briefly to refer to some of the most important, because they are richly illustrated by woodcuts, which must not be overlooked in a closer study of the development of the sacrificial bronze vessels. At first, i.e. during the T'ang period, only inscriptions were reproduced, but during the Sung period artistic and archæological interest had been awakened to such an extent that the objects themselves were also illustrated. The first work to contain such illustrations was K'ao ku t'u, composed by Lü Ta-lin (1092). Some years later, in 1107, there appeared Hsūan-ho po ku-t'u, with text by Wang Fu, i.e. an illustrated account of the Antiquities in the Hsūan-ho palace, where the famous art-collector, the Emperor Hui Tsung, kept his treasures. The bronzes which are illustrated in this work were probably all lost in the war-like times which ensued when the victorious Tartars and Mongols plundered and burned the imperial palace. It was not until 1740 that a new work of similar importance was published, by command of the Emperor Ch'ien Lung, who commissioned a number of distinguished connoisseurs and men of letters to compile a catalogue of his collections. It appeared in forty stately volumes under the title Hsi ch'ing ku chien (A Mirror of the Antiquities in the Imperial Palace). In combination with the subsequently published supplement, Hsi ch'ing hsü chien, this illustrated catalogue constitutes a work of reference of fundamental importance for a knowledge of the old Chinese bronzes. Some of the objects illustrated may still be seen in the so-called Bronze Museum in the palace at Peking, but the collection has shrunk considerably since the days of Ch'ien Lung. Among later Chinese works deserving of special mention are Chi Ku-chai chung ting i ch'i k'uan chih (Inscriptions on Chi Ku-chai Vessels), a collection of 560 inscriptions on old bronzes, together with

### TYPES OF ANCIENT BRONZES

distinguish three groups: I, bowls and pans, intended for the preparation of solid food, principally meat; II, vessels for the exposition of fruit and grain sacrifices; and III, jars and beakers for sacrificial liquids, water and wine. Their number and importance certainly depended upon the social position and resources of the person making the sacrifice. Their shapes and ornaments were modified in the course of time and in some cases even the names were changed. Thus in the Han period there occurred quite frequently large bottle-like vases and water-jars, which are unknown in any earlier period. The ornamentation is not, strictly speaking,

bound up with the different shapes. The same ornamental motive appears with slight modifications in several of these vessels, and as we have already briefly mentioned them and suggested their probable derivation from carvings in wood and bone, we shall not here go further into detail.

The *li* tripod, of which the form is recognizable in the written character by which it is indicated, is, as we have seen, a very ancient type. There exist examples of such vessels in bronze which are quite devoid of ornamentation and which could equally well have been executed in clay (Plate 24 B). In general, however,



the bronze vessels of this type are furnished with thin longitudinal stripes or flutings, which are drawn out over the swelling body and the tapering legs, the upper outward curve of which is further emphasized by a kind of serrated combs or high ribs (Plate 24 A). In later specimens horizontal bands are often added, and instead of

a critical commentary by Yüan Yüan, 1804, and Chin Shih so (Studies on Metal and Stone Work), published in 1822 by the brothers Fêng Yün-peng and Fêng Yün-yüan, a work which is still of great value, thanks to its good illustrations of well-chosen material. The finest collection of old Chinese bronzes which has been assembled in modern times is the property of Baron Sumitomo's heirs in Osaka, Japan, and a magnificent catalogue of this collection has been published, containing illustrations in phototype and coloured engravings. It consists of four volumes of bronze vessels, three volumes of mirrors, and one volume of bells.

Among later works relating to Chinese bronzes we may specially mention:

- E. A. Voretzsch, Altchinesische Bronzen (Berlin, 1924), which contains numerous illustrations of bronzes in the ex-imperial collections, formerly in Mukden, now in Peking.
- A. J. Koop, Ancient Chinese Bronzes (London, 1924), a popular work with unreliable text and some good illustrations.
- W. Perceval Yetts, Chinese Bronzes, in a Burlington Magazine monograph: Chinese Art (London, 1925). An article containing numerous interesting quotations from Chinese writings, and a good bibliography.

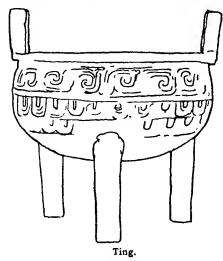
Arthur von Rosthorn, Die Altchinesischen Bronzen, in Wiener Beiträge zur Kunst und Kultur Asiens, 1926, an account based on philological and historical studies.

Tch'ou Tö-yi, Bronzes antiques de la Chine appartenant à C. T. Loo et Cie (Paris, 1924).

W. Perceval Yetts, Catalogue of the George Eumorfopoulos Collection of Chinese and Corean Bronzes, etc. This work is now in course of publication, and the present writer has not had an opportunity of consulting it.

the pointed feet of the clay vessels these bronzes have somewhat broader hoof-like feet.

The second tripod form is called, as has been said, ting. It was used, like the *li*, for the preparation of solid food and was thus placed over a fire, but it cannot be described as equally adapted for boiling, since the legs are not a direct prolongation of the bowl, and are not hollow but solid supports under a cauldron-shaped bowl.



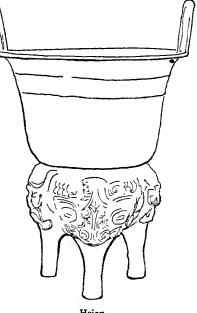
The transition from the bowl to the legs is formed, in early examples, by large t'ao t'ie masks, from the jaws of which the legs are seen to issue. Three such ting may be seen, for instance, in the Sumitomo Collection at Osaka; in the oldest of them the t'ao t'ie masks are of such an archaic type that the vessel was conceivably made before the beginning of the Chou period (Plate 25 A). The same kind of decoration, in more or less organic cohesion with the form of the vessel, appears, however, in many later bronze ting. In the Chinese catalogues (cf. note on preceding page) special kinds of ting are distinguished according as they are decorated with k'uei, chiao ch'i (coiled

dragons), p'an lung (interwoven dragons), ch'an wên (cicada pattern), leiwên, etc. No other sacrificial vessel was so widely used or had so manifold variations as the ting (Plates 26, 76). No less than 233 examples are quoted in Emperor Ch'ien Lung's catalogue.

Li tripods supporting cauldron-shaped vessels are called hsien. The type may be designated as a secondary development, although it appeared as early as the "pre-historic" period. It was also often made in later times, both in pottery and in bronze, when the decoration of large t'ao t'ie masks becomes more pompous and sculptural. It is in general one of the largest and most specialized boiling vessels used for the preparation of food at the sacrificial meals (Plate 25 B).

Deviating in principle from the above-mentioned vessels, which were all designed to put over a fire, are those in which corn, vegetables, etc., were placed. They consist as a rule of a bowl with more or less developed feet.

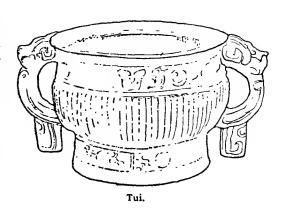
The commonest are the tui, very deep bowls with two side handles on a circular or square foot, also



known as i (a name originally used for various kinds of sacrificial vessels). This simple form was in all probability executed in pottery, before it was

#### TYPES OF ANCIENT BRONZES

adapted for bronze; among the latter there are specimens which can be dated to the beginning of the Chou period, or even earlier. Such is the case with the artistically perfect tui in the Sumitomo collection, the history of which can be traced in Japan for at least 1500 years (Plate 29). The bowl is divided, as is usual, by the two large handles issuing from the animal heads; the two façades (if we may so describe the two sides) are divided by vertical ribs or combs, which constitute the nose-ridges of the



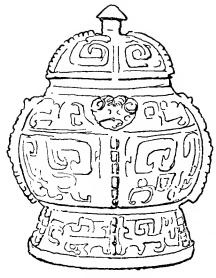
large t'ao t'ie heads, composed of two congruent halves, indicated by the large round eyes and nostrils. It appears as if these t'ao t'ie heads were composed of k'uei animals in profile, meeting in the central ridge, a grouping which recurs in the borders on the upper edge and on the foot, where we may notice a couple of two-footed fantastic beasts, with large eyes, passant, facing the centre, which in the lower border is indicated by a ridge and in the upper by an animal's head. The chief feature seems to be the eyes, large round knobs with a depression in the centre; for the rest, the animal is conceived with great freedom. There is perhaps some truth in von Rosthorn's suggestion that these eyes may indicate the presence of the ancestors at the sacrifice. The idea is not unknown in classical and Christian art, where eyes sometimes signify an invisible spiritual presence.<sup>1</sup>

An unusual and particularly beautiful variety of tui is to be found in M. Eumorfopoulos's collection in London (Plate 28). The bowl has four handles instead of two, and is consequently divided into four corresponding sections, which are decorated with a large conventionalized animal, of which the head terminates in a snout or trunk. Both these and the smaller geometricized animals on the border of the foot and close to the handle are executed in thin, almost thread-like, relief lines in a style which reminds us of the bronzes which may be considered as of the Yin period. In the hollow of the vessel is an inscription, on the basis of which Mr. L. C. Hopkins is inclined to date this tui in the period 1105–1078 B.C.,<sup>2</sup> a date which cannot be regarded as quite certain, but which is yet not contradicted by the archaic, attenuated ornamentation.

Another round vessel on a low foot used for the presentation of sacrificial grain is called *lei*. It may be distinguished from the *tui* by its more urn-like shape; it is usually higher and narrowing at the mouth, and furthermore, when complete, provided with a lid. Quite a number of such vessels are reproduced in the abovementioned Chinese catalogues and most of them seem to have been of fairly large

<sup>&</sup>lt;sup>1</sup> Cf. A. von Rosthorn, op. cit., p. 34.

<sup>&</sup>lt;sup>2</sup> Cf. Yetts, op. cit., p. 4.



Lei (Chou period).

size. We reproduce on Plate 33 an important specimen, from the Metropolitan Museum, decorated not only with conventionalized kuei and t'ao t'ie heads, but also with rams' heads in plastic work which have been fixed on the shoulders of the urn. Similar lei urns may be seen in the University Museum in Philadelphia and in the collection of Mr. C. T. Loo.

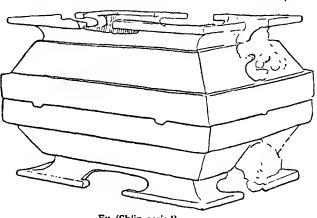
When the bowl is four-sided and stands on four low feet, it is called fu. Such trough-like bowls with large handles, often provided with a lid, we know especially from the Han dynasty or the immediately preceding period, but it seems beyond doubt that they also existed in the Chou period. A fine specimen is in the possession of the Chicago Art Institute; it is decorated with an engraved

pattern of intertwining geometricized k'uei, and plastic animal heads. To judge by

the ornamentation, this fu belongs to the so-called Ch'in bronzes (Plate 103 B).

Similar flat bowls in circular form with a lid are called kui.

Considerably diverging from these are the so-called tou, round bowls on high candelabra feet, which were used for the display of fruit. As has already been remarked, they were also made in pottery and it is not improbable that the high foot was originally made of bam-



Fu (Ch'in period).



boo, on which was placed a wooden plate. The distance from such primitive tou to the domed bronze vessels, which sometimes almost have the character of cups, with (or without) lids, is, however, very great; the latter are often so elegant that it is difficult to suppose that they were made in the Chou period. As a rule they have no relief ornament, but only engraved patterns, though there is in the Metropolitan Museum in New York an exceedingly fine tou, on which four tiger-like animals, plastically rendered, clamber up to the rim of the bowl. The animals, as well as the upper ornamentation of the bowl, indicate that it belongs to the Ch'in. or possibly the end of the Chou, period (Plate 108).

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A whole series of different types of vessel was also developed for liquid sacrifices, which were made to ancestors and to some of the earth spirits and to the household gods. These vessels were in earlier times called by the generic name tsun; according to Chou li, the custodian of the sacrificial vessels was responsible for the "eight tsun" and the "eight i," but when the ritual became more complex and the transition was made from simple water to fermented grain liquors, various vessels were devised for the preparation and tasting of the mixtures.

The commonest main type of such sacrificial vessels retained the name tsun. It is a large vase-shaped vessel, usually divided into three sections: a bell-shaped foot, a somewhat outward curving body and a chalice-shaped neck, as appears in a typical specimen in the Chicago Art Institute (Plate 31). In it we also find the foot and the body divided into four vertical sections by ridges of the same kind as in several already-mentioned tui. The decoration consists of two large t'ao t'ie masks on the body as well as highly conventionalized k'uei on the foot. In this specimen the neck is not decorated, but has a rare tactile beauty, due to the jade-like surface of the polished metal, with a shimmer of rust-brown and emerald.

An unusual variation of the tsun type is revealed by the splendid square vase in the Freer Gallery in



Washington, which, judging by its technique and style of decoration, must be considered one of the finest of its kind (Plate 32). The angular shape and the strongly emphasized architectonic division into foot, body, and neck impart to this vase a remarkably structural character. The large heraldic birds on the body, and the k'uei-like monsters on the foot and on the lower section of the neck appear in low relief, like silhouettes, on a background of lei wên. On the upper part of the neck are seen large, lancet-shaped figures, sometimes explained as ch'an wên (cicada pattern), sometimes shan wên (mountain pattern). The dark and glossy surface is like polished stone, shimmering in various shades of green.

Another tsun, with typical shape and decoration, is included in the series of twelve sacrificial vessels which were taken from the above-mentioned tomb at Pao-chi hsien and which are now in the Metropolitan Museum in New York. The series was completed, as has been said, by six spoons, a small ladle and the low bronze table which may have been used in sacrifices to ancestors (Plate 34). It is decorated with animal heads and k'uei lung of the same elongated shape as may be seen on a number of chariot fittings and other ornamental objects from the latter part of the Chou period. To judge from the traces on the table, it originally supported only one tsun and  $two y\ddot{u}$ ; the other vessels probably stood beside it, to be used when required. The spoons probably served for stirring water and wine, and with the small ladle the drink was scooped from the larger vessels into the smaller. Their elegant and

appropriate shapes cannot fail to excite admiration; the large spoons grow out like leaves from the stem-like handle, which latter terminates in broad coiled dragon ornaments silhouetted in pierced work (Plate 35).

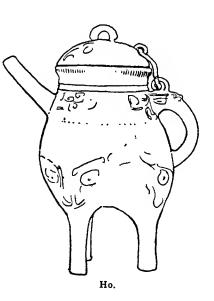


Passing to the sacrificial vessels themselves, we find besides the tsun (Plate 36), decorated with large t'ao t'ie heads, two so-called yü, urns or cans with lids and arched handles. intended for the keeping and transport of the sacrificial wine (Plate 37). They are practically of the same type, although one is somewhat smaller and is placed on a square plinth. Both the urn and the lid are divided by four fantastically profiled ridges, which curve like the stem of a boat over the swelling urn and stick out like pointed ears from the lid. This zoömorphic hint is emphasized by the animal heads on the handles, which are crowned with ears resembling elk-horns. The decorative motive is otherwise ornithomorphic in character. Heraldically posed birds, with large, round eyes, long hooked beaks and flame-like wings occur here in five borders,

varying somewhat in size and shape, but all fantastically wild and bold, as the dragon birds (k'uei fêng) should be. Curiously enough, there are also yüvessels, formed like owls or other birds, whose wings

are covered with lei-wên designs and dragon ornaments, and whose removable heads serve as lids. (cf. examples in the Sumitomo and Eumorfopoulos collections.) (Plates 47, 48).

Much simpler is the so-called ho, a vessel which, as the name indicates, was used for mixing (or spicing) drinks (Plate 39 B). It is provided with three feet, a spout, lid and handle—something like a teapot—but is also found without feet. The bellied tripod shape seems to relate it to the li and, just as in a number of such vessels, so also here t'ao t'ie masks mark the beginning of the feet, but the ornament is only engraved, except for the large protuberant eyes, which are executed in relief. Round the neck is a border of similarly engraved k'uei, and the handle emerges from an animal head.

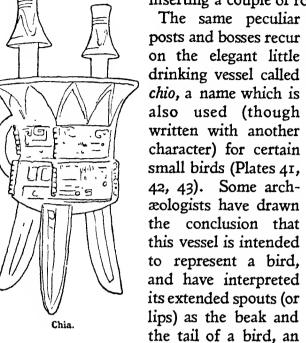


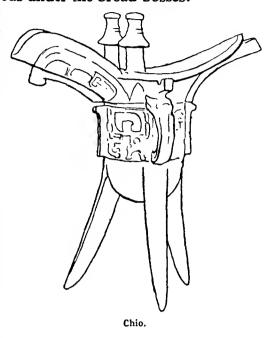
Reminiscent of this vessel by its li-like tripod form is the so-called chia, which was possibly used for heating up wine over a fire (Plates 39 A, 40). From such a use the

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square posts with round bosses rising like ears from the curved rim can also be

explained: the vessel might easily be lifted from the fire by inserting a couple of rods under the broad bosses.

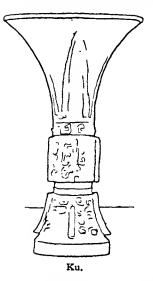




interpretation which may be supported by the fact that there exist chio with lids in the shape of a recumbent bird. This association of ideas is, however, most probably of later date than the first appearance of this type of vessel. In earlier times this vessel, like other jugs and beakers, was, no doubt, made in horn or wood, but I know of no examples of ceramic chio of early date, only later imitations or modern forgeries in white clay. is remarkably elegant, thanks to the swing of the high legs and the prolongation of the rim in two long spouts; nothing can be more natural than that such a form was perpetuated for decorative purposes. The knobbed posts on the rim of this vessel are usually explained as a contrivance for lifting it from the fire with the help of a couple of rods, but it should be mentioned that a Chinese writer of the 18th century asserts that these posts are so placed and so proportioned, that the contents of the vessel are emptied as soon as they touch the eyebrows of the person drinking, without the latter leaning his head back. One explanation does not, strictly speaking, exclude the other; it is difficult to express an opinion on their comparative merits, especially so long as we do not know if the sacrificial wine really was heated. The chio with bird-shaped lid entirely lacks such bars (Plate 43). By means of the side handles and the vertical ridges these vessels are usually also divided into four fields, which are decorated with eyes, and more or less abstract conventionalized k'uei on a ground of lei-wên; under the brim there is usually a band of cicadas in lancet form. These decorative elements recur in a number of chio of the Chou period, but I have seldom seen them executed with greater refinement than in the elegant little beaker

in the Freer Gallery in Washington, which has, moreover, an exquisite patina shifting from light green to blue (Plate 42).

The narrow trumpet-shaped vessels, called ku, were sometimes swung by the officiant over the sacrificial altar and there are examples furnished with a bell in the foot,



"in order better to attract the attention of the spirits." The elongated narrow form is perhaps evidence that such vessels were originally made in bamboo; in bronze they are shaped according to the same artistic principles as tsun, i.e. with a bell-shaped foot, a short body and a long trumpet-shaped neck. The foot and the body, which are divided by vertical ridges into four sections, are usually decorated either with fragmentary k'uei or with so-called "silk-worm larvæ," whilst the neck is encircled by a band of coiled dragons and elongated cicada ornaments, which are drawn up in points towards the wide mouth (Plate 44).

It is one of the types of vessel which varies very little in respect of shape and ornament during the successive periods; it is also well represented in the above-mentioned set from Pao-chi hsien (Plate 34).

Among the sacrificial drinking vessels may still be mentioned a larger mug or beaker on a ringed foot called *chih*. The form is full, not to say a little plump, an impression which is further emphasized by the bulging, almost baroque, ornamentation (Plate 45). The large t'ao t'ie head on each side is executed in very high relief and furnished with twisted rams' horns, the points of which project outward. Along the foot and the neck are borders of k'uei with enormous protuberant eyes. The surface is eaten and covered with warts, the whole being more terrifying than inviting

to take in the hands. But it would be difficult to find a beaker with a more concentrated artistic energy of expression. Better than any of the other specimens of the same set, this chih reveals an art inclined rather towards bombast than towards refinement in the ornamental detail. Although the motive is the same as on many other sacrificial vessels of the Chou period, it appears harsher, not to say more violent, than on most contemporary bronzes. Possibly this fact, too, may be regarded as an indication that the Pao-chi hsien tomb belonged to a prince of the Ch'in tribe.

In addition to the types of sacrificial vessels which we have described in the foregoing, certain other larger jars and bowls might be mentioned, which, however, do not appear to have gained any wide popularity until the Han period. We shall thus have occasion later to return



<sup>1</sup> Cf. Voretzsch, op. cit., p. 95.

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to these p'an and hsi, i.e. round basins for fruit sacrifices or for ablutions—as also to the large vase—and bottle-shaped vessels, p'ing and hu, which served as wine and water jars. They were modelled during the Han period on classical patterns and were made in clay as much as in bronze. There also occur various kinds of boxes and caskets, so-called an and lien, in which smaller objects were kept.

Of greater artistic interest than these relatively simple types are the sacrificial vessels in the shape of animals and birds. A few words on these may here be added, as they also were made for the purpose of preserving wine or other liquids, though, strictly speaking, the best among them are, indeed, real animal representations, and could as well be deferred to the chapter on sculpture. Naturalistic animal motives, such as heads of rams, tigers and birds appear already on quite early sacrificial vessels. As a rule these heads in high relief were employed as handles or handle fastenings on the sides of the vessels, a use which is developed later when rings are inserted in the mouths of the animal heads. They then appear as comparatively detached elements against the background of the conventionalized traditional ornaments. In other cases the bird or animal shapes, as it were, coalesce with the vessel itself; a certain part of the animal, usually the head and fore part of the body, is transformed in order to accord with the practical use of the vessel. The Chinese have allowed themselves great liberties in this respect, though they are always guided by a remarkably sure feeling for the most characteristic features in these zoomorphic or ornithomorphic motives. The joined fore parts of two rams supporting a vase (tsun) constitute a brilliant example of this kind of vessel (Plate 46). Scarcely less interesting is a four-footed pot with lid and handle (yü) in the Sumitomo Collection which consists of the fore parts of two owls which have, so to speak, grown together (Plate 47 B).

The owl had evidently a special significance in the religious conceptions of the Chinese, and was often introduced into the tomb with the dead. Presumably this was due to the ability of these birds to see in the dark, their wakefulness and fear of light; on the roof ridges of larger buildings a kind of owl with a fish tail (ch'ih wên) was often placed as a protection against fire. It is certain that the owls, which were transformed into wine vessels, are very much alive and are characterized not only by striking realism but also by a certain touch of humour. Wings and feathers are conventionalized in the form of coiled dragons, fish scale and lei wên, but these decorative surface motives are so skilfully subordinated to the actual shape that they scarcely weaken the impression of the bird-motive. The artist has possessed a fundamental idea of the bird which dominates in spite of all traditional ornamentation. The best examples of such bronze owls occur in the collections of Mr. Eumorfopoulos and Mr. Wood-Bliss (Plates 47 A, 48, 49).

Curiously enough, sacrificial vessels (tsun) have also been made in the form of elephants, although this animal can scarcely have had any direct connection with the Chinese sacrificial ritual, even if it actually existed in central China in the Chou

period. Two such specimens are known to me: the one was in the possession of a Chinese dealer; the larger and more important one belongs to the Camondo Collection in the Louvre (Plate 50 A). The actual body of this large elephant is perhaps perfunctorily treated, but the head, with the round eyes, the flapping ears and the upturned trunk (now unfortunately broken off) are very expressive, and the whole work is dominated by a certain slow, heavy rhythm which is well adapted to the subject. The surface is entirely covered with lei wên and conventionalized animal forms, united into a kind of large t'ao t'ie heads on both sides, whilst the trunk is covered with fish-scale ornaments. By its swelling round form and by the ornamental surface motives this elephant reminds us strongly of a great drum in the Sumitomo collection, which is surmounted by two birds and adorned in front with a human mask against a background of geometrically conventionalized animal motives (Plate 50 B). It is undeniably one of the greatest rarities to find anthropomorphic motives on the bronzes of the Chou period. The mask of the drum is therefore of special interest, and it is worthy of mention that the compiler of the catalogue of the Sumitomo Collection, Professor K. Hamada, has pointed out the resemblance of this mask to Mexican sculptures.

A similar resemblance or correspondence seems to us even more striking in the famous yü vessel in the same collection, which represents a man in the jaws of a wild beast (Plate 51 A). How this remarkable motive is to be interpreted is still an unsolved riddle, though it is certain that similar motives—men or human heads in the jaws of wild beasts—often occur in old Mexican art, where they have a symbolical religious meaning. The similarity is, moreover, still further emphasized by the type of the man, who is, indeed, much less Chinese than Mexican. It is true that the animal itself is covered with the usual Chinese ornamentation (lei wên and k'uei), etc., but they constitute only a veil over the chief motive, which appears so strange and surprising in Chinese art. The art of the Chou period was, on the whole, not directed towards anthropomorphic or realistic representation; it was an abstract and symbolical art, bound up with cosmological ideas and ritual custom. That certain typical animal and bird motives were used was probably due to their religious or mythological significance.

In connection with the bronze vessels we may mention here the large ornamented bells, chiao tou, which, owing to their ornamentation, their monumental form and their magnificent material, have always been greatly prized by Chinese collectors and connoisseurs (Plates 52, 53).

These bells, which may vary in height from 10 cm. to a metre, have usually an elliptic section and are provided with an upright handle, a kind of bolt which served to fasten them to a wooden frame. On the other hand they have no clapper; the sound was produced by striking the bell with a wooden knocker. In consequence of the elliptical form, two identical bellied sides were produced, each of which was usually divided into two rectangular fields, separated by a broad trapezoid band. These fields in all the older bells are furnished with nine high-pointed knobs or

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nipples arranged in three rows. To what extent these knobs served ornamental or acoustic purposes it is now difficult to determine, but it is probable that originally they were introduced for acoustic reasons, i.e. to augment or damp the notes of the bell, though in later examples they became purely ornamental. The plain fields between the three rows of knobs, and also the lower part of the bell—the actual lip which was struck by the wooden knocker—are usually decorated with ornaments in low relief representing conventionalized dragons, k'uei, p'an-chi, and similar motives which we know from the sacrificial vessels, but there are also bells with a freer division of the decoration and with high ornamental ridges issuing from the ends of the ellipse. The above-mentioned standard type appears, however, to have predominated in the Chou period, a fact which did not exclude occasional special forms, remarkable for their individual beauty, as may be seen for instance in a couple of ancient bells imported by Mr. C. T. Loo and sold to American collectors (cf. Plates VIII and XXI in Bronzes antiques de la Chine, etc., Paris, 1924).

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The bronze vessels and bells which we have been considering in the previous paragraphs, and which we have classified according to their traditional names and types, cover no doubt a long period and must have been made in various districts both inside and outside the Chou empire. Unfortunately none of them has a definitely dated inscription, and exact information as to where they have been found is in most cases wanting, consequently it is as yet very difficult to establish a definite series of chronological evolution within this particular field of bronze art. A few observations about the probable succession of different types of ornaments and modifications in the style of decoration may, however, be attempted here, even if they cannot be as yet of a final nature.

We have given a hint about what might presumably be regarded as a very primitive type, which indeed must have existed already before the beginning of the Chou period, and we will have occasion to note certain quite definite stylistic criteria on the vessels which probably were made in the Ch'in period, i.e. in the 3rd century B.C. As to the others, we have avoided a chronological definition. It was, however, noted that the set of sacrificial wine vessels found at Pao-chi hsien represents a quite definite type of ornamentation which in all probability could not be dated before the 6th century and presumably may be located in the north-western part of the country.

Another group of sacrificial vessels all found together in a single tomb is that from Hsin-chêng near Chêng-chou fu in Honan (now preserved at Kai-fêng) and, as pointed out by Bishop, these might with a good deal of probability be dated somewhere between 400 and 200 B.C. The ornaments of some of the vessels of this very unequal set already herald the so-called Ch'in style, thus indicating that we are at the end of the Chou period.

These collective finds may thus to some extent be used as supports for the

chronological grouping of a certain number of bronze vessels, but both belong, no doubt, to the later part of the Chou period.

The actual supports for dating the earlier vessels are indeed much more scanty, the only starting point being some of the carved bones and inlaid bronzes from An-yang hsien.

From the little we know at present it seems, however, most probable that there was an important group of quite early bronze vessels ornamented with conventionalized animal patterns executed in a kind of thread relief, i.e. the design is outlined with rounded strings; the decorative effect is not emphasized by any great contrasts of light and shade (vide the bowl in the Eumorfopoulos collection reproduced on Plate 29 and compare this same bowl and the bell in the Art Institute, Chicago, Plate 53 A). This kind of ornamentation also reappears on some of the carved marble fragments said to come from An-yang hsien and on one or two of the gongs from the same place, illustrated in Lo Chen-yü's above-mentioned publication.

Another group of early bronze vessels shows a similar subdued treatment of the conventionalized animal reliefs, though with the difference that the defining contours are not treated in thread-like relief but sunk into the ground while the main pattern stands out in flat relief, this being practically the reverse of the previous method, as may be seen on the tsun in C. T. Loo's collection, illustrated on Plate 30, and on the vessel consisting of two rams in Mr. Eumorfopoulos' collection. Ornamentation of this type reminds us of the carved white pottery which, even if it cannot be dated with certainty into the Yin period, may be taken to illustrate quite an early type of Chou vessels.

The rather thin and sparing manner in which the conventionalized animal motives are treated in the previously mentioned examples is still to be felt on the very beautiful tsun with a dark patina in the Art Institute, Chicago, illustrated on Plate 31, though the relief has here more body and the various motives, such as the t'ao t'ie, k'uei lung, etc., stand out more definitely than in the bronzes with a more strictly linear design. The various parts are modelled, though at the same time rounded off, so that the whole gives an impression of unity and smoothness. There is not as yet any great search for contrast, nor is the ground specially ornamented with lei wên or any other kind of incised pattern.

The decorative effect becomes quite different when the main animal motives, be they conventionalized dragons, birds, rams' heads or the like, are rendered in silhouette on a ground which is covered with thread-like meanders in quite low relief. This method of decoration, which evidently became so much in vogue for important vessels during the Chou period, may be seen fully developed on such important examples as the *i* in the Sumitomo Collection (Plate 29), and the tsun in the Freer Gallery (Plate 32). The splendid decorative effect of such vessels depends not only on the two or three different relief planes in which they are worked, but also on the colouristic contrasts produced by the different quality of the successive layers. The tsun in the Freer Gallery, particularly, is a fine example of this method of ornamentation, and here we may also observe a tendency to increase plastic relief effect

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by accentuating high points such as the big eyes of the birds, the upturned ears of the rams' heads, and by adding high ridges or bars which serve to divide the pattern in sections. All these elements bring in a note of energetic tension and structural force which was not apparent in the earlier vessels.

The same tendency is to be found still further developed in the yü and chih vessels of the Pao-chi hsien set, where the bars dividing the vessels into sections have grown very high and become dented, and where the ornamental motives have taken the shape of wings and horns with sharp points that sometimes are turned outwards (cf. Plates 37, 45). The boldness of these reliefs and their somewhat heavy, not to say crude character, strike us almost as a barbaric exaggeration of a stylistic tendency which is more or less apparent in a number of Chou vessels. It may be that this particular development took place not in the central part of classical China, but in the region where the Ch'in tribe had its home. The bold plastic relief style recurs on many vessels, but seldom with the same degree of sharpness and tension as on these Pao-chi hsien vases, which from a stylistic point of view form a group of their own.

Approximately of the same period, though evidently from a different region, are vessels of the type exemplified by the large lei with rams' heads in the Metropolitan Museum (Plate 33) and also the owl and monster-shaped vessels in the Eumorfopoulos and Sumitomo Collections (Plates 46, 47). Here the conventionalized animal forms are worked out in fairly high relief, sometimes in two planes, and furthermore provided with engraved ornaments, which indeed serves to produce a richer surface effect. Although the forms here too wind up in spirals or claw-like points, they do not curve outwards, and the unity of the surface is unbroken.

At the side of such vessels treated with plastic ornaments existed evidently others on which ornamentation is practically engraved, though with a clear distinction between the ground which is covered by very fine lei wên patterns and the main design which consists of somewhat broader lines, thus standing out as a dark arabesque on the lighter ground (cf. the chia belonging to the Freer Gallery reproduced on Plate 40). This particularly refined and minute manner of ornamentation is, of course, most suitable for minor vessels, such as yü and chio. In the most beautiful examples it is executed with the fineness of goldsmiths' work, and although the vessels, no doubt, are moulded, it is hard to believe that they may not have been worked over with a sharp instrument after the casting. The manner implies not only a highly developed technique, but also a particular feeling for the material and its requirements (cf. Plate 42). In conjunction with the high polish of the metal this very intimate treatment of the surface sometimes suggests an almost silky sheen.

All these various types of ornamental styles seem to have been in use during the early and middle part of the Chou period, when the decorative art was on the whole of a quite severe and virile type, strong, and in the best instances rather restrained. As we proceed towards the end of the period the general tendency seems to be to break up the surface into richer compositions and also to develop the handles and lids into more intricate silhouettes. This may be observed, for instance, in a pair of

fittings on carts and horse trappings, but there are also animal heads which may have formed parts of sacrificial vessels and larger ornaments, which were possibly applied on coffins or elsewhere in the tombs. On the other hand it may be noticed that bronzes for personal adornment hardly occur in the Chou period, nor do we know any mirrors of this early time.

The animal heads, be they t'ao t'ie, tigers or rams, are usually treated as silhouetted masks and are hollow on the back. The earliest ones are almost rectilinear, with a flat surface, on which the features are engraved (Plate 59 F); the later ones are more modelled, often with bulging eyes, ears and nose (Plate 59 A, B, C). When executed on a larger scale, the heads sometimes become transformed into purely ornamental shapes which, however, reveal their origin by their long pointed, or rolled-up ears and their large eyes (Plate 59 D). Particularly noteworthy are also the large birds' heads consisting simply of a beak, an eye and a plume (or comb) but which, nevertheless, convey an impression of a proud and plucky cock (Plate 60 B).

The larger fittings, which were presumably fastened on coffins or on some other pieces of tomb furniture, are either in the shape of highly conventionalized t'ao t'ie masks (of which there is a good example in the Art Institute in Chicago) (Plate 59 D), or complete animals such as the four marvellous tigers (two in Mr. Oppenheim's collection, two belonging to M. David Weill in Paris) (Plate 62). They are represented sitting on their curved tails and grasping with the lifted fore-paw the long hairtuft or plume of the heads. The form is only slightly modelled, the bronze quite thin, but the well-unified elastic contours impart to these beasts an air of strange grandeur, and the heads, with open jaws and rolled-up snouts, are aweinspiring.

A very important place among the cart fittings is taken by the axle caps, on which the ornamentation is often of the same kind as on the above-mentioned dagger-axes (ko), i.e. dragon heads, with open jaws and large eyes, attached to ribbon-like bodies which are rolled up into spirals or meanders. The knobs of their cross bolts are treated like animal heads, in the round—tigers, hippopotami, rams and the like (Plates 64, 65 A, C)—but there are also examples of cross bolts ending in human figures of the same primitive type as the man in the jaws of the t'ao t'ie on the famous vase in the Sumitomo Collection (Plates 65 B, 66). These human representations form a homogeneous class of their own, and they are, indeed, quite far removed in type from those which prevail in Chinese art of the succeeding centuries.

In many instances it is hard to tell whether a certain ornament has been fitted on the cart or the horse trappings. This is true, for instance, of the tall dragon-shaped objects with loops on the back which exist in several collections. Nor do we know how those triangular shield-formed objects with dragon ornaments, usually found in pairs, were used (Plate 61). The traditional supposition that they were fastened on the horse's forehead is contradicted by their high loops on the back as well as by the fact that they are found not only in pairs but also together with long, flat objects, decorated with similar motives, which evidently could not be used on horse trappings

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(Plate 60). They may rather have been fitted on carts or on other pieces of tomb furniture, though a definite designation of their use is impossible until complete sets of harness have been found in situ.

More probably used as parts of trappings or of large horse-bits are the shell-shaped coiled-up objects with a round hole in the middle and a loop at the edge (Plates 67, 68). The rolled-up coil may terminate in an animal's or bird's head or it may resemble a headless snail. Many varieties of the same kind of object have come out from China lately, some almost half moon-shaped, others of square shape but likewise provided with a hole and a loop. Both these types are found in the museums at Toronto and Stockholm (Plate 68 B). Besides these may be recalled some quite simple horse-bits ending in large rings and a kind of hollow round bells in pierced work—sometimes in bird-shape—containing a small ball, which were evidently fastened on the neck or back of the horses. These last-named objects belong mostly to the so-called Scythian class, though they were probably used by the Chinese as well as by their nomadic neighbours.

All these ornaments, which may be associated more or less directly with the harness of horses and soldiers' armour, seem to have appeared towards the end of the Chou period, largely independently of the ornamentation which we find on the ritual bronzes, and it is not improbable that it arose from the ever-closer contact of the Chinese with the mounted barbarian tribes which from time to time harried the north-west frontier districts. These hardy warriors, who are mentioned in Chinese history under different names, such as Hsiung-nu and Hun-yü, and who may be broadly characterized as Mongols, were in respect of civilization and state-craft far inferior to the Chinese, but they were better equipped for war, thanks especially to their habit of living on horseback.

The Chinese in earlier times had no cavalry, but only chariots and infantry, and this antiquated equipment often made it difficult for them to ward off the incursions of the barbarians. In order to remedy this state of affairs King Wu Liang of Chou, in the year 307 (according to Ssū-ma Ch'ien), ordered that a cavalry division should be established and that the soldiers' dress should be changed to that of the barbarians, i.e. they were to adopt trousers and shoes instead of the customary long gowns and large cloth slippers.<sup>1</sup> The change, which was probably introduced in several of the kingdoms which then constituted China, had a special significance in respect of art. So soon as the horse was used for riding, and not merely to pull the carts, new and better trappings became necessary, and these were to some extent made according to the modes of the barbarians.

We shall have occasion to consider in detail this influence in the study of the art of the Ch'in and the Han periods, but it should be remembered that it made itself felt as early as the latter part of the Chou period, although only to a limited extent. So far as we can discover, it can really be traced only in small ornamental bronzes belonging to the trappings of horses and the equipment of the soldiers. The ritual bronzes were scarcely affected by it at all. It was only during the Han period that

<sup>1</sup> Cf. Chavannes, Les Mémoires historiques de Se-ma Ts'ien, Vol. V, p. 81.

this kind of ornamentation, consisting mainly of animal motives, spread over a wider range of artistic activity.

The great majority of the Chou ornaments—including animal heads—form stylistically a direct continuation of the art of the Yin period and their style is so homogeneous that it is difficult to establish any reliable chronology within this material. The Chinese themselves are content with a still more general chronological method; they are accustomed to refer their old sacrificial bronzes to "the three dynasties" (san tai), consisting of Hsia, Shang and Chou, or also to the Han dynasty. In a work of the 13th century, known as Tung t'ien ch'ing lu, there are a number of general observations on the artistic ideals and style of the three oldest dynasties which may be quoted here, though it seems hazardous to draw definite conclusions from somewhat vague pronouncements.<sup>1</sup> "The Hsia dynasty valued fidelity; the Shang dynasty valued substantiality; the Chou dynasty valued ornamentation. These characteristics also appeared in the crafts of each dynasty. Under the Shang dynasty the various articles in use were simple in form and without ornamentation, while under the Chou dynasty they were very finely and lavishly engraved. This may be regarded as the invariable rule. Articles produced under the Hsia dynasty stand in a class by themselves. I have seen a bronze spear of the latter dynasty, inlaid with gold—the lines being as fine as hairs and this is common to all its productions."

The ancient origin of the technique of inlay is confirmed by other utterances. Whether it began during the Hsia or the Shang dynasty it is impossible to determine, but it is at any rate noteworthy that it does not occur in characteristic creations of the fully developed Chou period. It seems to be reserved to works of a somewhat earlier date, and it occurs again, though in a quite different style, in many of the ornamental bronzes of the Han period.

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# EXCURSUS ON THE EXECUTION AND MATERIAL OF THE CHOU BRONZES

The examination of the Chinese bronzes from a technical point of view has not as yet been carried far enough to give us a complete idea of the method of their execution, but a few observations relating to this question may nevertheless be added here, particularly as they also coincide with the old Chinese description of bronze casting quoted below.

It is obvious that the Chinese, just as well as other bronze casters, modified their

<sup>1</sup> Cf. Giles, Adversaria Sinica, No. 9, p. 291.

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methods according to the shape and nature of the objects which they were going to produce. Thus, for instance, they used moulds made up of two halves for flat objects such as weapons, bronze coins, mirrors, belt hooks and the like. These flat moulds were made either in stone or in baked clay, and their ornaments were engraved or carved. In the case of sacrificial vessels or objects in the round, the technical procedure was, no doubt, of a more complicated kind and may, indeed, have varied to some extent at different epochs, but the general principles of casting were probably developed already at the beginning of the Chou era.

Broadly speaking, these may be defined as a kind of "cire perdue" though in some instances of a somewhat simpler kind than the method which is practised nowadays. The general character and surface effect of the ornaments on the early bronzes indicate that they must have been cast on wax models and at the same time we find on these specimens more or less heavy seams which are the traces of the joints of the sections of the moulds used either for the casting of the wax model or of the bronze itself. The wax models may have been identical with the original positive models, or they may have been produced, particularly at a later period, by a similar process as that still in use among so-called cire perdue casters. According to this method, a mould in two or more pieces is taken from the positive model (which may be of clay, wood, or pottery, etc.). It is then taken off, and again put together and firmly tied. Molten wax is poured into this negative shell which has to be quickly turned so as to make the wax penetrate into all the small cavities and form an even coating on the whole negative. When the desired thickness has been obtained and the wax has become solid, a core is filled in. Then the mould is taken off; the wax model which is now bare may conveniently be improved or retouched as the case may be. On this wax model is then built a fire-proof mould, which begins with the painting on of a very liquid mud, and which is gradually made strong and thick enough to resist a great heat.

Of course this method is the one which allows of the greatest perfection and it may indeed have become known in China when the art of casting was well developed, but the earliest vessels were more likely cast in the same section moulds, which were taken, as we have said, on the original positive.

The greatest difficulty in the operation follows now, when the wax is to be melted out and the bronze to be cast in. This, of course, is done in two stages, and the skill of the bronze caster shows itself in the way in which the metal exactly fills out the hollow left by the wax. If the casting is perfect, the object needs no further polishing, except for the removal of the traces of the channels through which the bronze was poured in, and as far as we may judge from examples known at present, the Chinese must at quite an early date have reached the technical knowledge necessary to obtain good results without any posterior work on the bronzes after casting.

The method is in part described, though in a somewhat flowery style, in the Chinese work of the 13th century called Tung tien ching lu, from which we may

offer the following quotation in Giles' translation (Adversaria Sinica, No. 9, p. 293):

"The ancients, when casting, always began by making a wax model, on which they placed an inscription, or engraved ornaments. They then took a small bucket, rather larger and wider than the model, and set the latter therein. Cracks were left at the bottom of the bucket, for draining purposes. Next, well-strained mud was mixed with water to the consistency of thin rice-gruel, and with this the model was watered daily, each coat being allowed to dry before the second was applied, until the bucket was full and the whole model covered. When this was done, the staves of the bucket were removed, and an application of fine clay, with plenty of salt and fibre of paper, was quickly and firmly applied to the outside of the original layer of mud, together with an extra application of two inches of clay, a hole being left in the middle for the liquid bronze to enter. This method is not certain to yield success at the first attempt, which is the ideal result."

From this description it appears that the primitive way of casting was indeed to make a mould directly over the wax model. The core is not mentioned, and it is thus difficult to decide whether the author supposes that the core pre-existed with the wax model, or that it was made simultaneously with the outer coating. Evidently his description is incomplete, as it does not say a word of the inevitable process of melting out the wax, and as he explicitly speaks about "the method of the ancients," this may indicate that he regarded it as antiquated and that a somewhat more perfected technique of the kind we have been describing later came into use. It should furthermore be noticed that he specially mentions the inscriptions which he says were "placed in the wax models," an operation which may have been performed with a sharp instrument or with a kind of seal, the important point being that it was imprinted or carved on the wax model, so that in the finished vessel it appears below the surface. Engraved inscriptions, with more or less sharp edges, are as a rule later additions, frequently made with the object of increasing the historical importance and the economic value of the object. The Chinese themselves have, indeed, always collected these old bronzes more as historical documents than as works of art.

The ornaments were also principally produced by modelling, cutting, engraving, and imprinting on the wax model, but it is evident that many of these objects have been worked over, after casting, with the chisel; otherwise their precision and smoothness would be hard to explain. Later on (during the Han dynasty) a number of ornamental fitments, handles, feet, etc., were cast separately and soldered on. If a bronze vessel has a separately cast and inserted bottom, it is usually dated later than the Chou dynasty by Chinese experts.

Concerning the actual metal alloy, we have as yet no exact information. It is clear that it varied with different kinds of objects and probably also with different periods, but the analyses which have hitherto been made are not sufficiently comprehensive to permit of any general conclusions. Certain information on this subject is given,

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however, in an appendix to Chou li called K'ao kung chi, which is not without interest:

"Copper is used in six different proportions. If tin amounting to a sixth part is added, then it will be suitable for bells and dishes; if a fifth part of tin is added, then the alloy is suitable for halberds; if a third part of tin is added, then the alloy is suitable for knives and arrow points; if tin is added in half as large a proportion as copper, the metal can be used for mirrors."

The composition of the metal is, of course, also important in regard to the patina or surface effect which the objects gradually assume when they lie buried in the ground; though this depends in at least an equal degree on the character of the earth with which the object has come into contact. The genuine bronze patina is thus the result of a gradual chemical action. Since the patina has in all ages attracted great interest on the part of collectors, and has to some extent constituted a criterion of the importance and value of archaic bronzes, it is natural that it was often imitated. Relatively late bronzes have been provided with a patina which imparts to them a more ancient and more richly decorative beauty. In certain cases such an imitated patina is comparatively easily recognized. It lies like a scale on the surface and can be removed by splintering, hammering or scratching; but in other cases it is an integral part of the metal and cannot be removed by boiling or scratching, especially if it has been created in a natural way, i.e. by burying the object in a specially prepared earth. (It is asserted that this method has been used in China as a sort of investment of capital in order to increase the value of the object for future generations.) The tendency of Western collectors to regard the patina as a criterion of the antiquity and artistic value is therefore not always well founded. There exist authentic old bronzes with a perfectly even dark surface without any colour effects or corrosion (especially if they have been preserved above ground as family heirlooms), and there exist on the other hand comparatively late bronzes with a very beautiful patina, which shows all the signs of age and authenticity. Concerning the views of the Chinese themselves on the patina and its artificial production, the following account is given in the above-mentioned Tung tien ching lu (Giles, op. cit., p. 291):

"Bronzes which have been lying in the earth for many centuries, acquire a pure blue colour like that of the kingfisher. During the twelve hours before noon, this hue is somewhat dull; but under post-meridian influences, the kingfisher tint becomes so glossy that it seems likely to drip. Here and there the earth has eaten into the metal, forming holes or abrasions, very like the track of a snail. If there are marks of cutting or boring, the article is a fake. Bronzes which have been lying in water for a long period, will acquire a pure green colour, lustrous like jade. A shorter period will produce the green colour, but not the lustre. As to holes, etc., the same remarks apply as above. . . .

<sup>1</sup> Cf. W. Perceval Yetts, Chinese Bronzes, London, 1895, pp. 6 and 23.

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"Imitation antiques in bronze are made by mixing quicksilver with tin, producing the compound now used for backing looking-glasses, and spreading this uniformly over a new bronze. Then, strong vinegar mixed with finely-powdered granite is evenly painted on with a brush, and the bronze is allowed to stand until it becomes the colour of wax or tea, when it is quickly plunged into fresh-drawn water and kept there to soak until the wax-tea colour is set. It is then allowed to stand until it becomes the colour of varnish (dark brown), when it is again quickly plunged Into fresh-drawn water and kept there to soak until the varnish-colour is set. A further short soaking will effect the change of colour required. If not, put into water, the bronze will take on a pure kingfisher-blue. In all three cases, the article must be rubbed with a new cloth to make it bright. The smell of the bronze is entirely absorbed by the quicksilver, and cannot make itself noticeable. On the other hand, the sound of old bronzes is ringing and clear, while new bronzes sound heavy and dull, and cannot fail to be detected by the connoisseur. When old bronzes have been a long time in the earth, they absorb a certain earthiness, to such an extent that, if used for growing plants, the flowers will be unusually fresh and bright, blossoming early and fading late, or actually bearing fruit in the vase. Such, too, is said to be the effect of rust from water. Pottery which has lain long in the earth is also said to possess this characteristic."

It is, in fact, extremely difficult, not to say impossible, to indicate definite material characteristics as a foundation for the dating of Chinese bronzes. Both the metal alloy and the patina may vary considerably within the same period, and as to the inscriptions, they often give (when their authenticity is raised beyond doubt) an approximate indication, but it should be noted that hitherto not a single inscription from the Chou period, or earlier, has been found which contains an absolutely certain date. The earliest bronzes provided with definite nien hao (dates of a reign) are from the Western Han dynasty.

# 5 JADE

The stylistic character of the Chou period may be studied not only in the sacrificial vessels and ornamental bronzes but also in a great number of carvings in jade and similar material which have been excavated from the same tombs as some of the bronzes. It should, however, be noted that by no means all the so-called Chou jades really originated in that remote period. Indeed, the imitations in this field are much more numerous than the originals. They have been made in practically all ages and often in a material of the same kind as that which was used in the earliest times. Since, moreover, the most important ritual objects have retained the same

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forms in the course of the ages, it will be clear that it may be difficult to determine whether, for instance, a pi or a ts'ung jade was executed during the Chou period, or shortly before or after.<sup>1</sup>

The decision must depend on tactile criteria as well as on the shape and stylistic character of the object. If the objects are ornamented, the possibility of decision is increased, less on account of the ornamental motive, which can be imitated, than on account of the technique, the manner in which the stone has been worked. It is the nerve, firmness and rhythm of the lines which is of supreme importance, and which is also most difficult to imitate.

It is natural, therefore, that the artistic significance of jade cannot be realized through descriptions or illustrations. It depends on such an intimate association of technique and material (jadeite or nephrite) that one must hold the object in the hand and follow the incisions with the fingers in order to reach any conception of the distinction and severe beauty of these early jade objects. They require a tactile, as well as a visual, appreciation.

Jade has in all times played an important rôle in China, not only as an ornament of more or less artistic character, but also for amulets for the living and the dead. Purifying and protective influences (both physiological and moral) were attributed to the material, which influences depended on the quality and workmanship of the "jade." According to the old ceremonial rites, the emperor used white jade, the princes of the first and second degree green jade, the highest prefects blue, etc. The symbolic meaning of the various objects was emphasized by the form and ornamentation, a principle which applied not only to ritual but also to ornamental jades. Actually, the great majority of the jade ornaments may be regarded as representing a sort of artistic picture writing; they express an association of ideas, a desire, a wish or a characteristic quality, which, at least originally, related to their use and their owners. The jade trinkets were elaborated according to social and individual distinctions in a higher degree than any other ornaments, and they are often especially characteristic of the creative imagination of the Chinese. Interesting in this connection are the remarks of a writer of the later Han dynasty, Pan Ku (died A.D. 92) who, in speaking of early jade ornaments, remarks: "Girdle ornaments symbolized the various occupations of men; the tillers of the soil wore ornaments in the form of the plough-share or the plough handle; workmen wore ornaments

¹ The best introduction to the study of Chinese jade is still B. Laufer's work: Jade: A Study in Chinese Archæology and Religion, Chicago, 1912. It contains a complete bibliography of older Chinese works on the subject. Among these we need only mention Ku yü t'u k'ao, by the Chinese statesman Wu Tach'êng (1889), on which Laufer largely bases his discussions. Of recent years much new material has appeared, of a kind to modify many of the theories of the above authors. A later book, Early Chinese Jades, by Una Pope Hennessy, London, 1923, contains a number of fine illustrations, especially from the Eumorfopoulos Collection, but the text is uncritical. Much more valuable is Pelliot, Jades archaïques de la Chine appartenant à C. T. Loo et Cie (Paris, 1925), though in this work only a limited number of jades are treated, mostly earlier than the Han period. Laufer has recently written a small catalogue of A. W. Bahr's jade collection (Chicago, 1927) in which he announces that he is preparing an entirely revised edition of the above-mentioned larger work.



in the form of axes and hatchets; married women wore pins and needles in the belt to show that they were married, but they also suspended jade objects from the girdle."

The majority of the oldest jade objects appear, however, not to have constituted personal ornaments but to have been used in the ritual of the great sacrifices to the animating forces of nature. In Chou li (which may be considered a literary reconstruction of the Han period of older ritual customs) are mentioned a number of such objects, but it has not been possible to establish any definite correspondence between the literary descriptions and the objects taken from the ground. We are thus in many cases very much at a loss with regard to the actual use and meaning of the objects, but this does not prevent us from appreciating their beauty as works of art. Broadly speaking, it may be said that the earliest jades for ritual purposes were distinguished by great simplicity, absence of ornament and a more or less geometrical symbolic form.

This applies, for example, to the large flat rings, called pi, which were originally symbols of the sun or of heaven, and consequently also of the emperor. They vary considerably in size and colour, but it should be noticed that the diameter of the round opening must not exceed half of the breadth of the surrounding ring. Rings with other proportions between the hole and the disc bear other names, yüan, hu, and have another symbolism (Plates 69, 70 B). These objects were no doubt used in the great sacrifices to heaven, but the emperor used the pi also as gifts to certain princes and persons of high rank, who thus had the right to carry them on ceremonial occasions. When buried in the tombs they seem to have been placed either on the breast or under the back of the dead; at any rate, a pi has been found in this position in a Korean tomb of the 3rd century. In later times the pi-shape was freely used for decorative jade objects, but was then usually covered with ornaments in relief or with engraved designs.

The other great cosmic symbol used as a ritual object at certain sacrifices is the ts'ung, the symbol of the earth and the token of the empress. It is hollow like a tube but externally square, so as to represent the four corners of the earth, and it varies considerably in length and proportions (Plate 71). There are ts'ung which reach a length of  $\frac{1}{2}$  metre, and others which hardly exceed 5 cm. The ritual colour of the earth-symbol is, of course, yellow, and such were those placed on the altars at the sacrifices to the earth spirits, but besides these, ts'ung of various hues appear which may have been used as gifts by the empress or for less official purposes.

In Chou li we read: "With the round pi of blue-green colour the emperor worships heaven, with the square ts'ung of yellow hue he worships the earth, with the (flat and) long kuei of greenish hue he worships the eastern region, with the red chang the southern region, with hu, the white tiger, he worships the western region, with the half pi (called huang) the northern region."

This passage has a certain interest as a reflection of the ritual customs ascribed to the Chou period, though it seems open to doubt whether the objects mentioned

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were used merely as indicated. In the course of time they became, indeed, of a more decorative nature, though retaining some of their symbolical significance.

Besides the pi and ts'ung there were, according to Chou li, ritual jades called kuei, a name which, however, has been adopted for a number of objects of somewhat varying character, used for different purposes. The original kuei may have been, as explained by Wu Ta-ch'êng and Laufer, a "hammer-shaped" object symbolizing sovereign power, but the kuei transmitted to posterity are more or less chisel-shaped, i.e. long rectangular tablets ending in a point or in an edge which may be straight or curved. It would take us too far to give an account of all that has been written about the different kinds of kuei, such as ta kuei, chen kuei, yüan kuei, yen kuei, ts'ing kuei, etc. (cf. Laufer, op. cit., pp. 80-99; Pelliot, op. cit., pp. 15-23).

The two first-named were, according to *Chou li*, the principal ones: "The emperor having ta kuei (the large tablet) in his girdle and the chen kuei (the tablet of power) in his hands, offered during the spring the sacrifices to the Sun in the morning."

Different kinds of kuei were also bestowed by the emperor as insignia of rank on the feudal princes, while other objects resembling by their general shape the kuei may have served as ritual emblems or instruments at certain sacrifices. They are provided with a short, holed handle set off against the blade by dentations or ridges (Plate 72 A). This handle is too short and angular to serve for the grip of the hand and seems, indeed, more fitted to be inserted in a wooden shaft. It is thus quite probable, as suggested by Professor Pelliot (op. cit., pp. 21-23), that these ritual objects were no real kuei but derivations from the ancient Chinese type of arm, which is known as "ko" and has the character of an axe or dagger fixed at right-angles to a long shaft (axe halberd). When executed in jade, they have of course no longer any practical use as arms, but have become purely ceremonial emblems. Their edge is often curved concavely, but there are others in the shape of pointed knives or daggers, either straight or curved like scythes (Plate 72 B). Characteristic of them all is the short, drilled angular handle which hardly can have served any other purpose than to fix the "knife" into a shaft. The largest known, which was in the Tuan Fang collection, measured no less than 95 cm. but most of them are much smaller, some no more than 4 or 5 cm. long. The thin double-edged blades are often executed with wonderful skill in broad bevelled planes; their sharp definition and tactile beauty are of a kind that has hardly been achieved in any other material.

A simpler form of "sacrificial knives" is represented by the long one-edged implements which have a broader back-ridge provided with three or more holes (Plate 72 c). They have sometimes been identified with the so-called ta kuei, but to judge by their shape and incisions, they must have been fastened to handles which continued in the direction of the blades and may thus be derivations from another type of ancient sacrificial arms. It should be added that there exist also knives in which both handle and blade are of jade.

The huang, or half pi, is also to be found in various sizes and colours, though never

on the same scale as the largest pi. It is said to have served at sacrificial ceremonies, though it is evident that similar objects later on formed parts of pendentives and took on a different meaning. We shall have occasion to return to these when discussing the jade ornaments of the Han period. The hu (tigers) exist, indeed, also in jade (Plate 73), but when executed in a recognizable naturalistic shape—such as the wonderful white tiger in Dr. Gieseler's collection—they must be ascribed to the Han rather than to the Chou period.

Among the jade objects which were possibly used in the sacrificial ceremonies may furthermore be mentioned some large curving dragons, either flat with engraved or slightly raised designs, or treated in the round like the monumental dragon in Dr. Gieseler's collection (Plate 70 A). This splendid, not to say monumental, dragon makes, indeed, the impression of a ritualistic object, and there may be some truth in Dr. Gieseler's supposition that it was used in sacrifices for the purpose of obtaining rain. Most of the later dragons are clearly ornamental, but as this symbolic creature is so clearly associated with clouds and water, it is quite possible that the earliest representations were made for a ritual purpose and that the large curving jade dragons had their origin in the sacrifices to invoke rain and a good harvest. The dragons were, however, also considered good omens in other respects and thus became very popular motives on many kinds of jade objects.

In addition to the ritual objects, there have been taken in recent years from the Chou tombs—and possibly also from the above-mentioned tomb at Hsin-chêng in Honan a number of small, mostly flat, articles of light-hued jade, carved in the form of birds, fishes and all sorts of animals, not to speak of the fantastic zoömorphic shapes such as t'ao t'ie, k'uei lung and k'uei feng, etc. (Plate 74). The majority of these jade articles are holed, which seems to indicate that they were fastened to a string as ornaments, or else sewn to dresses, but to what extent they were made exclusively for ornamental purposes is at present unknown. It is probable that they also had a symbolic meaning (just like the ornaments on the bronze vessels), though we have as yet no information on the subject.\(^1\) Moreover, it is not the strange fabulous beasts or the t'ao t'ie masks which attract most interest, but the more naturalistically shaped animals and birds-stags, pigs, dogs, hares, ducks, etc.-often strikingly characterized and alive, in spite of the fact that they are simply flat silhouettes with engraved lines (Plate 75). Fully modelled animal shapes are comparatively rare, though they also occur-just as do small human figures-thus confirming what we have already said in speaking of the bronzes, i.e. that the artists of the Chou period by no means lacked a sense of animal character and movement, though for reasons of style they represented them in a conventionalized abstract form. To them, much more than to later masters of a more naturalistic trend, art was a symbolical means of representation, which was able just by reason of its conscious and consistent abstraction to express cosmo-philosophical and religiomythological ideas of a more general order than those which inspired the religious art of later periods. Like religion, this art was bound to certain ritual customs and

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traditions, but just as the aim of the ritual was to bring human actions into harmony with the working of nature, so the art also of the period appears to have seized the essentials in phenomena and to have sought to suggest a reflection of the great creative forces, the everlasting rhythm of movement and repose, which lies at the bottom of all life.

# THE CH'U AND CH'IN PERIOD

We must by no means imagine that the period named after the Chou dynasty was a well-unified and clearly defined one, either politically or in the history of its art; its outlines are quite blurred, not least because the kings who nominally reigned lived a somewhat shadowy existence towards the end of the period. Indeed, they had already lost the main part of their political influence in the 6th century, although they were able to maintain an appearance of their old position under the protection of a mighty vassal, the flourishing Tsin state; but they ruled only over their capital and the neighbouring district. In the middle of the 5th century King K'ao divided it with his brothers, and about a hundred years later the legitimate king does not appear to have had any territory left (very much as the Manchu emperor in the Forbidden City after the establishment of the Republic). That he was nevertheless able to maintain his position was due to his privilege of performing certain major sacrifices—a privilege which was respected by the petty princes of his immediate vicinity—and to the fact that the real ruling powers in the kingdom had more important things to think about than to interfere with the harmless ceremonies of the ornamental King of the Ritual.

These powerful princes ruled over independent states, situated on the periphery of the region which had once constituted the Chou state, now divided up between small rival vassals. The most important of these powerful border states were, at the end of the 5th century, Ts'i in the North-East (Shantung and parts of Kiangsu and Honan), Ch'u in the South (An-huei, Hupei and a piece of southern Honan), as well as Ch'in in the West (Shensi and parts of Shansi and western Honan). The other states existing at the time were of comparatively less importance and stability; it was between the three above-mentioned states that the final and determining struggle for supreme power was fought out.

This violent political disintegration, by which the old feudal organization was eradicated, had its parallels in the spiritual world in important new developments. We remember how the great philosophers Confucius and Mo-tzŭ, under the pretext of a sort of traditionalism, or resuscitation of the moral principles of the past, modified in a high degree contemporary thought and political institutions. A number of new ideas arose in religion, legislation and administration; the old conceptions were dissolved, and from the remains there developed the new principles which are the spiritual criteria of the succeeding centuries.<sup>1</sup>

There can be no doubt that artistic activity was influenced by the current of new ideas and by the general socio-religious transformation, although the effects were felt much more slowly in this province than in politics, religion and in social conditions. A new style of art appears, however, to have shaped itself in the transition from the 3rd to the 2nd century, but how and when it first appeared, what degree of expansion or permanence it achieved, etc., are questions which cannot yet be

# THE CH'IN PERIOD: HISTORICAL NOTES

answered, because the available material is quite fragmentary and not sufficiently classified. Above all, we lack dated objects to constitute a point of departure for a chronological classification, and the information concerning the sites and circumstances of excavations are so incomplete that we can only draw a few general hypothetical conclusions concerning the artistic activity in the various parts of the country. But from all we can see, it was a period of great importance, particularly in the development of the decorative bronze art. The new mode signifies a release from the abstract symbolism of the Chou ornamentation, and the adoption of motives of a more naturalistic trend, less severely conventionalized than had hitherto been the rule.

If we remember the disintegration of the country into a great number of independent states—of which some survived for centuries—and also the profound ethnological and cultural differences that separated many of them, we cannot but imagine that artistic activity also to some extent reflected these political and ethnical contrasts. Very different traditions, needs and habits of life existed in several of the great and widely separated kingdoms. The Ch'u state had its connections towards the South; it had absorbed the so-called Man-barbarians; it was situated in districts which were in the future to be the home of the pantheistic romantic school of art. The western capital of the Ch'u state, Ying (the present Ching-chou fu in Hupei), was on the Yang-tze, and its eastern capital, Shu-chou, was situated on the river The T'si state, in the time of its ascendancy, ruled a large part of the lower courses of the Yellow River, together with the T'ai shan massif and the surrounding district, a country which had always been one of the most important centres of political and philosophical ferment, even though Confucius had had his abode in the Lu state just south of the border. The capital, Lin-tzŭ, was situated in the neighbourhood of the present Ching-chou fu in Shantung. The Ch'in state had its capital in Hsien-yang on the river Wei, not far from Si-an fu, and extended over territory in which the Chou kings had originally dwelt, but which they had ceded when they transferred themselves to the eastern capital. Lo-i in Honan. From this time—the beginning of the 7th century B.C.—it was the privilege of the Ch'in dukes to defend the country against the harrying barbarian tribes (Hun-yü, Hsien-yün, etc.), a privilege which naturally compelled them to develop the organization of their armies and to spend much of their time in the field. From a cultural point of view the Ch'in state probably played a less important rôle in the beginning than did its rivals in the South and East, but its political and administrative organization was exceptionally good, especially after the important reforms of the 4th century. By its constant exercise in war this state gradually became one of the most successful candidates for supreme power. From the point of view of art-history, its position as a frontier guard against central Asia probably also gave to it a special importance, since frequent contact with the Turko-Mongolian tribes no doubt also opened the way for impulses from more western centres of art.

his sway, he took the title Shih Huang-ti, the First Almighty Ruler (221 B.C.). With that date there begins a new epoch of extraordinary importance in China's political history. In fact this ruthless state-builder did all he could to begin the history of his country over again and to erase the traces of all that had been. To this end he had all books burnt except those dealing with medicine, agriculture and magic (which accorded with his Taoist ideas), and melted down a quantity of inscribed sacrificial vessels. From these bronze vessels and from weapons which were collected from the different provinces (presumably to disarm the people), he had cast twelve colossal statues and bronze bells, and to defend the kingdom against the warlike neighbouring peoples he began the building of the Great Wall (which will be further noted in the chapter on Chinese architecture). The period which took its name from the Ch'in dynasty is very short, if it is confined to the actual period of its dynastic rule, which ceases with Shih Huang-ti's incompetent son in the year 207 B.C. In the province of art, on the other hand, it may stretch further back in time, for the development of the style of ornament which appears to prevail under the great emperor begins considerably earlier, and probably in other parts of the country than those which were governed by the Ch'in kings.

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The artistic material of the intermediary period, which for the present may be called after the Ch'u and the Ch'in kingdoms, consists mainly of small decorative bronzes, mirrors, belt hooks, ornamental fittings for harness, weapons and horse trappings, besides sacrificial vessels and the like. Most of these originate from the neighbourhood of the eastern capital of the Ch'u state (Shu-chou in An-huei), but the same can by no means be asserted of all of these small bronzes. A fair number have been found in other parts of central or northern China and may thus be taken as proof of the fact that the style of this period was not limited to a small area, but spread over a good part of the country. The most important find of sacrificial vessels came to light through a landslide in the neighbourhood of the village Li-yü at the foot of Huang shan in northern Shansi. These vessels form a kind of nucleus around which several vessels and implements with a similar ornamentation may be grouped. They illustrate what is nowadays generally known as the Ch'in style, a mode of ornamentation which seems to have become popular in the 3rd century B.C. and which was still employed during the earlier Han dynasty. It thus seems that at least two homogeneous groups of ornamented bronzes may be established; a more southern, centred in the Ch'u state, and a more northern which may be considered as representing the general Ch'in art. The relation between these is, however, quite close; many of the ornamental motives are the same, and it is in some instances quite difficult to tell whether, for instance, a belt-hook originates from the Huai valley or from further north. But, as has been stated above, we have reliable information about the finds from the Huai valley, i.e. the district between Shu-chou and Ku-shih hsien in An-huei, and there is furthermore good circumstantial evidence for the supposition that these date from the 3rd century. It was only

### THE FINDS FROM THE HUAI VALLEY

towards the end of this century that the district was in its glory. The Ch'u king removed his residence to Shu-chou in 248 B.C., after his western capital, Ying (the present Ching-chou fu), had been taken by the enemy, but it was only a couple of decades until this eastern capital was also taken, and the resistance of the Ch'u state was definitely broken down by the victorious Ch'in armies. Thereupon the place presumably lost its importance as a political and artistic centre, though only for a time. In the year 197 B.C. it again became the capital of a smaller duchy, when the first Han emperor appointed one of his vassals prince of Huai-nan, a fief which lasted for about one hundred years. It is an obvious assumption that the discoveries made in this district date from the two short periods of political greatness, and that therefore the older ones still belong to the time of the Ch'u supremacy.

A large part of the material from the Huai valley was collected on the spot by the Swedish civil engineer, Orvar Karlbeck, who for many years lived at Peng-pu in An-huei, and was handed over by him to some Swedish collections—the Countess Hallwyl's, the East Asiatic Collections, and the author's—but a number of specimens have been scattered in other collections, such as the Freer Gallery in Washington and the Hopp Museum in Budapest. Karlbeck has also discussed some of these materials in a couple of essays and has endeavoured to classify them according to their ornamentation.<sup>1</sup>

They consist principally, as has been remarked, of smaller objects, weapons, mirrors, belt hooks, fittings for harnesses, carts and horse trappings and the like. The vessels which may be ascribed to the same group are comparatively few and less important from a decorative point of view. They are, however, distinguished by a remarkable refinement and simplicity which, together with the pale green patina of the bronze, make some of them exquisite works of art. This is true particularly of some smaller specimens, such as a small tripod in the Hallwyl collection and a round box in the East Asiatic Collections, which have no other ornamentation than fluted bands but with a surface effect which may be compared to that of polished jade (Plate 77). The larger ting and hu vessels, of which there are several examples in Stockholm, are in part less perfectly preserved, but of the same fine material, and they are remarkable for their proportions (Plate 76). They have no decoration except three small birds placed on the lid and t'ao t'ie masks to join the elegantly curving legs to the round bowl.

Characteristic of all the bronzes of this group, be they vessels or ornaments, is the unusually thin and brittle metal. The alloy is evidently of a special kind and by the contact with the watery soil in which the objects have been buried, it has taken on a pale green or light greyish colour, which is not common on the bronzes from other provinces. Some of the small ornaments are covered by a thin layer of brown lacquer. The technical execution is exceedingly fine; the ornaments have been engraved or imprinted on the wax models, and the casting is so careful that even

<sup>&</sup>lt;sup>1</sup> Cf. O. Karlbeck, Notes on some early Chinese Bronze Mirrors, China Journal of Science and Art, Jan., 1926.

the finest lines stand out with perfect clearness, without any subsequent engraving or polishing of the object. Few bronzes in China can match these from a technical point of view. They bear witness to an expert skill which presupposes a highly developed artistic culture.

The ornamental motives consist partly of linear plait and spiral patterns, partly of bird and animal motives, fused with the spirals, besides rectilinear ground ornaments combined with fantastic dragon motives in flat relief, as may be seen on certain mirrors. The simplest motives, the plaited bands in concentric rings, usually occur on round bosses and fittings belonging to horse trappings, but also on axle-caps, where they are sometimes combined with broader bands of spirals, meanders or rhomboid patterns (Plates 78, 79). The cross-bolt of these axle-caps is furnished with a large boss which is either decorated with a conventionalized dragon's head in low relief or it may also have the shape of a tiger or similar feline animal, executed in the round. Although of small dimensions, these animals are artistically alive and expressive in a manner quite different from the abstract animal representations on bronze vessels of the usual Chou type. The same kind of tiger-like animals executed on a larger scale appear also on a number of bells and sacrificial vessels originating from other provinces; the principal motives are indeed practically the same on all the bronzes of this period, though the technical execution varies to some extent in different parts of the country.

The spiral motives show a greater wealth of variety. On small objects, such as rings (from horse bridles or vase handles), thin coiled dragon bodies, belt-hooks in the form of birds' necks and slender fittings which terminate in dragon heads, they are made up simply of engraved lines, and continue in pointed lancet or beak pattern, whilst on broader surfaces they are developed in relief and terminate in a kind of pointed tongue or claw. Characteristic of all the last-named objects is a certain effect of depth; the spirals do not lie in a plane and do not constitute an even surface, but break it with their rising points, so that a certain play of light and shade is produced. This can be well seen in the powerful pole-fitting (possibly from a cart) in the Hallwyl collection (and a similar one in the East Asiatic Collections), and also in a number of dagger and sword hilts and some other objects, such as rings and ferrules, hinges, axle-caps, etc., which are covered with twisted and interlaced spiral tongues (Plates 78, 79).

These motives have found their most refined and complete development in a vessel of which only two fragments remain (the one in the Hallwyl, the other in the East Asiatic Collections) (Plate 81). Here spiral tongues have been combined with real birds' claws, which in places bore themselves through the relief band. Although the whole is executed in quite low relief, yet a certain depth has been achieved. One can distinguish three successive planes, and these are not simply superimposed, but the play of line is continued from one to the other. The whole surface gives the impression of teeming yet rhythmically grouped and controlled movement. The ground is entirely covered with engraved spirals. The pattern appears, in spite of its intricacy, with extraordinary sharpness and clearness. The fineness of

### CH'IN MIRRORS

execution, combined with the soft greenish patina, impart to this bronze fragment the beauty of a noble gem.

There are, as has been said, also mirrors decorated with the same kind of spiral motive, and in these the pattern seems to have been impressed on the clay mould with square stamps; the motive is repeated in square fields and the joints between them are clearly visible (Plate 83 A). By the outer framing rim and the inner ring around the boss the pattern has, however, been cut off and confined to a broad belt, which thus lies somewhat deeper than the smooth outer rim. The relief effect is flatter than in the previous case, but the motives are typical, and the technique and the metal alloy are quite the same as in the above-mentioned objects.

A somewhat richer decorative effect has been achieved in other mirrors on which the ornaments are arranged in two layers, the ground being treated with very thin spirals on which larger ornamental patterns appear in silhouetted bands. The layers are indeed very low and the mirrors have as yet no effect of depth, even the outer rims being quite thin. A very important example of these is the large mirror in the East Asiatic Collections (Plate 82), which has a ground ornament of thread-like spirals over which is laid a broad ribbon in the shape of eight segments of a circle meeting in sharp points which touch the outer rim, thus forming an octagonal star. Inside of this is another ribbon of the same breadth enclosing the central knob which is pierced as usual. The whole makes a rather flat effect and is evidently of a quite early type.

The same kind of ornamentation in two layers, somewhat further developed with more effect of depth and a grooved outer rim, may be seen on a smaller specimen in the same collection (Plate 83 B). Here the ground pattern consists of spirals of a more claw-like type, the tips of which rise out of the ground, and over them are imprinted four large oblique T-shaped figures, the cross-bars of which form a central square, where the small knob is surrounded by four flat roundels suggesting a quatrefoil. The T-shaped figures are here grooved, and produce thus in connection with the likewise grooved rim, a richer effect, a kind of shimmer of light, which gives more depth to the object in spite of the fact that it is very thin and the difference of level rather insignificant.

On a third type of mirror from the same district the whole of the bottom surface is covered with a kind of lozenge pattern consisting of oblique meanders, partly granulated and partly filled with spirals. On the top of this appear three fantastic animals with long tails—two dragons and a kind of ape (k'uei)—in flat silhouette (Plate 84 B). They have been produced in the same manner as the T-patterns on the mirrors described above, that is, with a deeper stamp, which was pressed over the ground design, but they stand out even more effectively, since the contrasts of the planes are well emphasized and the linear rhythm of the supple bodies is seething with movement. The ground has a pale greyish tone, the animals appear in dark silhouette; the outer edge is not even, but gorged. The mirror is just as brittle and thin as the preceding one, but even more elegant, as a result of the

gorged edge, the ring around the boss, and the circling lines of the animals. In other mirrors of this type the ground is covered with spiral patterns and the super-imposed silhouettes have the form of birds or ornamental pendentives (Plate 84 A). The type may indeed be described as the most refined among the earliest Chinese mirrors.

A later variation, or derivation, of this type of mirror shows the animal pattern still more conventionalized and prolonged into a kind of ornamental scroll or runner, while the ground is entirely covered by spirals (Plate 85 A). A further development appears to lead to an increasing elaboration of this animal runner in which one can clearly distinguish horned dragons' heads and clawed feet, though wings and tails assume the character of ornamental volutes and rhomboid figures are introduced as a connecting link between the coiled dragon bodies (Plate 85 B). Here, too, the pattern is arranged in two layers, but the contrast between the upper and lower layer is not so clear as in the preceding case, and the animal coil is developed according to a design which prevailed in the Han period (Plate 86). These mirrors may thus be of a somewhat later date than those we are at present considering but they deserve, nevertheless, to be mentioned here because they constitute a direct continuation of the foregoing, and were found in the same district.

Besides the mirrors, the belt hooks form perhaps the most homogeneous and most important group of ornamental bronzes of the period. It is quite possible that hooks of this kind were known in China already at the end of the Chou period, but as far as we may judge from the stylistic character of the material known up to date, they hardly came into general use before some time in the 3rd century B.C., and it may well be that the influence of the nomadic neighbours of the Chinese had something to do with the introduction of this new form of personal ornament. The small and short hooks, which are so common at this early time, seem to have served for the fastening of the sheath of the sword to the leather strap by which it was carried rather than for the belt itself. Such is at least the conclusion of some Japanese authorities who have examined the tombs in northern Korea where some of the short hooks were found. If we apply to all these hooks the generic term "belt hooks," we do it simply because we lack any more precise information as to their use, but it is quite possible that some of them served for fastening other parts of the dress or of the military equipment as well as for the belt. It is almost surprising to find how very popular these hooks became during the period here under discussion, and it would be embarrassing to explain their frequency, if they were never used for anything else than the belts.

Generally they do not as yet assume such important dimensions and splendid decorative shapes as during the Han period, but they comprise, nevertheless, a great variety of shapes and ornamental motives according to which they might be classified. To do it completely and to give a full account of this important class of ornamental bronzes would thus require a volume of its own and might easily lead to a full discussion of the evolution of ornament during the Ch'in and Han periods. At this place we can, however, only offer a few remarks attached to our

### CH'IN DRESS HOOKS

series or illustrations of belt hooks given on Plates 87 to 89, while the more important ornaments of the same nature which belong to the Han period will be discussed in the subsequent volume.

The hooks of the Ch'u and the Ch'in period may be divided into two groups: one consisting of small hooks which, as pointed out above, may have served for the fastening of the sword rather than for the belt, and another made up of longer, more properly speaking, dress hooks.

The former have usually a very large flat button or base on which the hook itself, consisting of a "body" and of an upturned hook, is placed. The body often takes the form of an animal head which is elongated into a kind of snout turning upward at the end. The heads vary in character and shape, but characteristic of most of them are the two large ears with upturned points. When there are eyes as well indicated below the ears, and the snout is not too short, an elephant's head seems to be suggested (Plate 87 A, B, C, D). In other instances the heads become of a more fantastic kind, more or less recalling t'ao t'ie with pointed ears (Plate 88 A, B, C, D, E). The elephant-headed hooks originate all, as far as we know, from the South, i.e. from the Huai river valley, an origin which may have something to do with the motive, whereas the hooks with more t'ao t'ie-like heads do not, as far as we know, come from the same neighbourhood, but mostly from further North. On others of these small hooks, the animal head with the pointed ears is substituted

by two small S-shaped dragons which either may be introduced pair-wise, like the ears, or replace the whole head. There are, however, also examples on which these coiling snake-dragons are changed into geometrical spirals without any animal heads (cf. Plate 87 E, F, G). These hooks also come from the Huai river valley, whereas the body of a contemporary hook, which probably is of a more northern origin, has the form of a single larger dragon curving into a spiral (Plate 87 H).

Another type, which is stylistically connected with the elephant-headed hooks, shows the pointed ears developed into a kind of wings; and there are examples of such hooks which, in addition to the wings, have a bird's tail and head, as may be seen on the specimen reproduced on Plate 87 K, which also is not from the region of the Ch'u state.

More common are, however, the small hooks, the body of which consists not of a complete bird, but simply of two wing-like ears and engraved spirals (Plate 87 J, L).

The t'ao t'ie or ram-headed hooks, which are characterized by the claw-like character of the upturned ears, as seen on Plate 88 A, B, C, show a further development, by the modification of the ears, into a kind of double spirals (recalling cocoons), a motive which again may be further complicated by the duplicating of these spirals which sometimes have snake's heads (Plate 88 D, E, J). There are, furthermore, hooks on which the coiled ears and the eyes are emphasized by inlaid gold threads, as may be seen on Plate 88, F and I, two particularly beautiful specimens in which animal heads still may be distinguished, though in a purely ornamental translation. The curving ear-like motives of these hooks may also be completed or extended

into a split tail which suggests a bird, particularly when the body is granulated and framed by a kind of wings (Plate 88 H).

A simpler derivation from the animal or bird motives mentioned above are the half-round, somewhat domed shields, often ornamented with engraved spiral motives which served as bodies on belt hooks with a more extended hook (Plate 88, K, L, M, N). This form, which seems most fitting for the practical use of the hook, illustrates, no doubt, a secondary stage in the evolution and survives in the Han dynasty.

An altogether different type of short hooks, which probably served for fastening the sword or similar purposes rather than for the belt, are the ones which have a body in the shape of a reclining animal or bird, represented as resting on the high boss or button, and whose bent neck or tail forms the hook itself (cf. Plate 87, 0, P, Q, R, S). The animals are executed in miniature and may not always be complete, but they are modelled in the round and characterized with the same striking naturalism as may be observed in the small animals on the lids of contemporary sacrificial vessels. They are indeed, in spite of their smallness, strong proofs of the high standard of the animal sculpture of the period.

The most completely developed and fitting dress hooks are, however, in the shape of elongated birds' or dragons' necks sometimes provided with horses' heads. When in bird shape, the bodies, which are arched over the high button, show engraved wings or feathers, and continue in long necks with bent-back swan-like heads. In the shorter ones, the body may take the form of a kind of hump over the button, but in the longer ones the body is drawn out into more elliptical shapes, forming a continuous curve with the neck, which also may be ornamented with engraved spiral patterns. The heads are worked out with great refinement of detail, be it that of a bird which holds a pearl in its beak or a more dragon-like head or what seems to be a horse's or a mule's head (Plate 89). The last-named motive, which recurs quite often on dress hooks of bronze and jade in later times (T'ang and Sung dynasties), is thus evidently of an early origin and may perhaps be taken as a hint that dress hooks of this type were first introduced by people used to an equestrian equipment.

A number of ornamental fittings and implements might be mentioned in connection with the belt hooks, but they are in many instances quite difficult to describe, because we have no information as to their proper use. There are thus, for instance, some small tube-like objects supporting birds' heads or twisted snake-dragons which evidently were mounted on thin wooden sticks—but for what purpose? Others are in the shape of curving dragon-necks ending in heads with open jaws; they may have been end-fittings on bows, though they appear rather brittle for such a purpose. Others have been mounted on thin poles or sticks as handles or toppieces. More easily recognizable are the long key-like objects with a ring-handle which served as bolts on a kind of lock. The construction of these locks may be observed in our illustrations of three different specimens in the collections of Countess Hallwyl, M. David Weill, and the Louvre (Plates 91, 92). On the former, which comes from the Huai valley, the lock is in the form of an animal standing

### MINOR BRONZES OF THE CH'IN PERIOD

between two tubes or doubled rings, decorated with engraved plaits; the latter, which evidently does not come from the same neighbourhood, is a more important object with two keys and double loops—on both sides extending from a kind of central tube. Strips of leather or thin metal may have run between the loops. The ornamentation is in this case still more intricate and exuberant with its small scaly dragons curving into S-shapes and ribbons which wind into spirals. Two broad t'ao t'ie heads are formed on the middle ridge, quite similar to those which we have seen on some of the belt hooks. The motives are indeed typical of the period, but they are combined here into an uncommonly rich and energetic composition, carried out with the greatest precision.

A still finer specimen of the same style is the sword-hilt in Mr. Eumorfopoulos' collection, which is executed not in bronze but in gold (Plate 92 B). It is, so to say, an enlarged and enriched version of the small saddle-shaped hilts or scabbard fittings which are found among the bronzes of the Huai valley group (Plate 93 G, I). The ornamental motives are fundamentally the same, i.e. ribbons winding into claws or spirals, but they are treated as scaly snakes or dragons with big heads and small wings. On the edges a kind of k'uei are added. The central portion is here, as on the object described above, emphasized by some large t'ao t'ie masks biting in the dragons. The most remarkable feature of this teemingly rich composition is, however, its colouristic effect, produced by the tone of gold and the play of light and shade in the pierced work. It may just as well be called a piece of jewelry, though made for use on a sword.

Another bronze fitting which may possibly have served on a scabbard or some similar object is to be seen in the collection of M. David Weill. It consists of two slightly bulging scabbard-like plates joined in a groove (Plate 93 E). They are covered by the usual plait and spiral pattern and seem to have been fitted to some object of wood or leather, possibly the end of a scabbard.

The full plastic beauty and energetic rhythm of the motives which we have been following on the objects mentioned above may, however, be best observed on a small round plaque (a lid?) in the Metropolitan Museum and on a pole-fitting in M. Henri Rivière's collection (Plate 94). Here, two long dragons intertwine and bite into a kind of curving stem which rises like a sprout from the ground. The animals are fully modelled, their movements have the tense energy of steel springs, and in spite of the small scale they form a monumental group which could be enlarged to any size.

We have no information as to where these objects were found, but the probabilities are that they come from the northern part of the country. They represent, generally speaking, a manlier, more energetic interpretation of the ornamental style here under discussion than the objects from the Huai valley, which are characterized by more elegance and gracefulness. Their intimate stylistic connection with some of the bronze vessels found at Huang shan in northern Shansi makes it also evident that they may be regarded as typical representatives of the fully developed Ch'in style. These bronzes are not all of equal quality and it seems doubtful whether they

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were all found at the same place (as claimed by the local people), but a dozen or more of them form a homogeneous group. They were brought to Paris by M. L. Wannieck, who also informs us that a number of similar bronzes still remain in the village of Li-yü. Some of the most characteristic specimens of this very remarkable series may be mentioned here. They represent well-known types of sacrificial vessels such as ting, lei, fu, p'an and hu, but there are also included a fantastic animal statue and a large sword with turquoise inlay on the hilt (Plate 96). This work of art, perfect of its kind, is evidence that these bronzes were made for some person of high importance, but there is no ground for reposing confidence in the local tradition, according to which the vessels were used by Shih Huang-ti at a ceremonial sacrifice on Huang shan. The objects are homogeneous in style; their ornamentation varies, though rather in abundance than in motive.

An excellent example of this group is the full-bodied ting bowl on short legs with a domed lid and two large handles. It is decorated with engraved bands of highly conventionalized, coiled dragons (so-called p'an-lung or p'an-chi), whose ribbonlike bodies are filled out with spiral ornament (Plate 97). The animal motive is so strongly geometricized that it almost becomes a plait ornament; it is repeated with certain variations in three different borders. Lowest down on the round body there also occur fine spiral ornaments. The feet, which are soldered to the vessel, are decorated by large t'ao t'ie masks. On the lid are placed three ducks and a recum-The same decorative motive reoccurs on a lei, the almost semispherical bowl and domed lid of which are also remarkable for their well-proportioned reposeful character. It differs from the ting in that it stands on a low round base and is provided with round-looped handles instead of the upright square ears of the former vessel. The decoration is restricted to intercoiled p'an-lung and engraved spirals on the handles. The three ducks on the lid add quite a note of repose and of nature, suggesting the tranquillity which still dominates so many corners of northern China.

Still more important are the sculptures which adorn the lid of a large tui (bowl for grain sacrifice), which differs from the two foregoing in that it has an oblong form and stands on four legs (Plate 98). The latter issue from ornamental t'ao t'ie masks and are furnished at the feet with smaller animal heads. The decoration of the bowl and lid is divided into three bands of p'an-chi and p'an-lung in quite low relief, filled with spiral ornament, and the strong, upright handles are adorned with plaited bands of the same kind as we have observed on many of the small decorative bronzes from the Huai valley. The most important motive, however, consists of the two rams, which lie in a crouching position on the two sides of the lid. Although on a small scale, these animals are distinguished by a real sculptural form, and they are worked out with great refinement of detail, such as horns, hoofs, etc. Their heavy repose, with legs partly extended and partly bent up, is rendered with intimate feeling (Plate 99).

Rams of a similar type may be found on the lids of a number of vessels more or less closely akin to those described above and usually also decorated with borders

## BRONZE VESSELS OF THE CH'IN PERIOD

of k'uei lung, designed in an ornamental fashion with spiral or plait designs on their bodies. Exceptionally, these ornamental designs are continued over the resting animals, which thus become an integral part of the ornamentation, yet retain in their general form a naturalistic appearance. This may be seen on a lid from a round vessel reproduced on Plate 100, which is distinguished by the unusual sharpness in the execution of its traditional ornaments.

A still richer development of the ornamental decoration may be seen on a large hu in M. Stoclet's collection (Plate 101), the ovoid body of which is divided in five successive borders filled alternately with intercoiling snake-dragons and friezes of birds and hunting scenes. The dragons, partly "granulated" and partly "roped," are executed in a very bold fashion with strong elastic curves which alone would impart to this hu an unusual monumental power. But still more important are the animal friezes. The lowest one consists of a row of running ostriches (?) while the two upper ones show illustrations of hunting scenes or single fights between men, armed with knives and spears, and big bulls or tigers. The bulls are shown stumbling with their horned heads against the ground, succumbing to the attack of the wild men, and the tigers are arrested in their onslaught by the long spears thrust through their necks. Animals and men are executed in flat silhouettes and the expression is mainly concentrated in the outlines, but these are quite enough to convey the impression of the fury of the fight. A purely naturalistic motive has here been rendered in a supremely decorative fashion with a power and an energy which were hardly surpassed in later renderings of similar motives. We will have occasion to observe a number of specimens in bronze and pottery of the Han period decorated with similar motives, and although they may be further developed in the way of naturalistic animal representation, they hardly ever reach the degree of monumentality which characterizes this vase.

Returning to the Li-yü bronzes we may note an animal statuette, now in the collection of Mr. Oppenheim in London, which shows a curious mixture of characteristic features borrowed from various animals and a very intimate blending of the linear ornamentation with the zoömorphic motive. One might hesitate whether to call it a pig, a calf, or simply a hare. In spite of this, the creature does not lack artistic expressiveness, though it is hard to tell why the artist has taken so little account of nature in creating something which must, after all, have had a symbolical significance connected with animal life. The ornamental motives with which it is covered are quite the same as those previously described, and there can be no doubt that it belongs to the Ch'in period (Plate 102).

Quite a different kind of animal sculpture is represented by the resting bull in M. Wannieck's collection, which is also said to have come from Li-yū and is by some authorities attributed to the Ch'in period. The conception is here very close to nature; the whole attention of the artist has been centred on a convincing presentation of the bulky form, the muscular energy and suppleness of the monumental bull. It is indeed a very fine piece of animal sculpture, more convincing from a naturalistic point of view than any of those fabulous creatures or minor animals

found on the vessels which may with a fair degree of certainty be attributed to the Ch'in period. It represents altogether a more advanced plastic art, and should, in our opinion, be attributed to the period of the Six Dynasties. We shall have occasion to discuss it in connection with some other quite similar animal sculptures of that time (cf. Volume III).

An entirely different conception is embodied in the large bronze hydra or dragon in M. A. Stoclet's collection, which has also been referred to the Ch'in period. This is indeed an entirely fabulous creation and in this respect not so far removed from the fantastic representatives of the animal kingdom made at this time (cf. Volume II, Plate 29). Yet it is adorned with an ornamental design which is different from those known on Ch'in bronzes, and more closely related to ornaments found on mirrors and other bronzes of the Han dynasty. It seems to us more likely that this, too, is of a somewhat later date than the period here under discussion, though by no means as late as the above-mentioned bronze bull. We therefore defer further discussion of this remarkable object to the chapter dealing with Han bronzes.

There are, however, besides those small animals resting on the lids of sacrificial vessels quite a number of somewhat larger zoomorphic creations of a wilder and more fantastic type. Most of them have evidently been made to serve as handles on large bells, though some may have served a similar purpose on other objects. As a very characteristic example may be mentioned a dragon-like hydra with horns, wings and a long tail, standing in the characteristic position with head thrown back, so that the whole beast forms an S-shaped double curve. The function of this animal was probably to serve as the ring or the loop of a bell, a practical purpose which is still more evident in another animal (also in the author's collection), of a more feline appearance (Plate 105). This specimen comes from the Huai valley and is, like the majority of the small bronzes from this place, ornamented with a kind of spiral pattern in quite low relief, which recurs, executed in higher relief, on the roof-like plate to which it is fastened. Though freely conventionalized for a decorative purpose, this tiger retains in its supple form and flowing rhythm a remarkable life-movement, and it is distinguished by the fine technical execution so characteristic of all the bronzes from the Huai valley.

Animals of a similar kind—with the same supple form and engraved ornaments—also occur on vessels and bells of distinct Ch'in style, which in all probability do not come from the Huai valley. Among the former may be mentioned the fine bowl on a high foot—a so-called tou—in the Metropolitan Museum, on which the animals are represented in a most unusual position, creeping up towards the edge of the vessel (Plate 104). Among the latter is a large bell, which Dr. E. Hultmark has deposited in the East Asiatic Collections in Stockholm (Plate 105). This bell has a large handle or loop for hanging up, consisting of two S-shaped curled animals with long tails, which may be said to belong to the same species as the above-mentioned tiger. The necks of the animals are encircled by a dragon, the body of which is divided into two coils, which combined constitute the actual loop. The bell is decorated according to the same system as the Chou bells already described; each

### CH'IN BELLS

of the main faces is divided into two corresponding fields, separated by a vertical stripe, which contain three rows of round bosses and two ornamental bands. These are filled with a kind of plait-like pattern, which reminds us of the p'an-lung and p'an-chi design mentioned before, although the individual elements have lost their original character and have become coiled bands ending in spirals. On the lower part of the bell there is a similar pattern, executed on a larger scale, and in this may still be observed the eyes and the wing-like ears of the animals, although the forms are fused in the ornamental rhythm. The decorative effect of these is unusually strong, owing to the execution in high relief of the spirals and bands. The same motive executed in low relief occurs on a smaller bell which was in the possession of Dr. Burchard in Berlin. This also was furnished with a handle composed of two S-shaped tigers, connected by a link, so that it could serve as a loop (Plate 107 A). The motive is typical of bells in the Ch'in style. Yet another example is to be found in the East Asiatic Museum in Berlin, in which the animals on the handle have a somewhat wilder character (Plate 107 B). They bite hard into the link by which they are joined together and strike their claws into the bell which they are designed to carry. The bronze, however, is much worn, in consequence of which the ornamental bands are largely abrased. Other bells of a similar type exist furthermore in Japanese and Chinese collections, though they have not, as yet, been made available in reproductions.

These bells, which constitute a very characteristic group, call to mind the accounts of certain bronzes which the Emperor Shih Huang-ti had caused to be cast. According to these accounts, which first appeared in the so-called Hsin-yü, Lu Chia, who lived from the Ch'in into the Han period, reports that the emperor had cast (out of the weapons which he collected from all parts of the country) not only twelve colossal statues representing gigantic men in barbaric costume, but also large bell-frames, adorned with "fantastic beasts with stags' heads and dragons' bodies." It is true that this description does not completely accord with the more tiger-like beasts which adorn the above-described bells, but it seems to apply to bells of a similar kind. Some of these animals are, moreover, horned and might possibly also be called dragons. The account therefore offers a further probability that these bells really are of the Ch'in period, or, in other words, that the ornamentation and the animal forms which we have been discussing on the preceding pages may with good reason be considered characteristic of the period in question.

The arts of the Ch'u and the Ch'in domains are, indeed, closely related, even though the former may in general be said to be characterized by a somewhat greater refinement of detail and technical perfection, and the latter by more plastic power and stronger relief. Characteristic of both is the plait motive, expressed either by intercoiled animal forms or by pure bands and spirals, which often occur as rolled-up wing tips or turned-in claws.

Exactly how far this so-called Ch'in period may be considered as a historical fact is at present impossible to say, because, as we have had occasion to point out, none of the objects is provided with a dated inscription. Strictly speaking, this denomina-

tion is thus of a hypothetical nature, but the circumstantial evidence is, as we have seen, strong enough to justify such a grouping of the material. And, indeed, if any progress is to be made in the study and classification of the enormous material of ornamental bronzes from China, we must make use of some such working hypotheses. It may at least be claimed that the bronzes described under the Ch'u and Ch'in appellation reveal a greater homogeneity of style and ornamental motives than practically any other group of Chinese bronzes. They seem, indeed, to have been executed within a comparatively short space of time, which must have lain between the later part of the Chou and the early part of the Han period. We shall have occasion to notice, when discussing the material of the Western Han dynasty, a great number of important new influences which entirely modified the character of Chinese art and which evidently resulted from the highly developed intercourse between China and Western Asia during the early part of the Han dynasty. These are not noticeable in the art which we have classified as of the Ch'u and Ch'in period, and which, after all, may be considered as a natural offshoot of the artistic genius of the Chou period. To make this evident a more detailed discussion of the later Chou bronzes, such as those found at Hsin-chêng in Honan, would be necessary. On these one may already observe a tendency to modify the earlier strictly geometrical animal shapes into more freely treated fabulous creatures, detaching themselves from the mass of conventionalized ground patterns, though lacking in the refinement and balance which are so characteristic of the so-called Ch'in bronzes. These may thus be considered the most perfect products of the indigenous evolution of Chinese ornamental art, which no doubt started as early as the Shang period and which during a thousand years or more remained conventional in spirit and conservative in style, being supported by the religious traditions of the people. The new impetus received during the Ch'in times was perhaps more in the nature of a general awakening of the creative spirit than of a completely new foundation for the artistic culture of the country. Art is still symbolical and ritualistic in spirit, though less abstract than in the Chou period. It is directed towards a more complete plastic, not to say naturalistic representation, but it still finds its main inspiration in symbolic thought rather than in the observation of nature.

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### NOTE

The letters E.A.C. signify the East Asiatic Collections, Stockholm. The letters between brackets signify those who have secured the objects in China; thus—

J.G.A.—Professor Andersson O.K.—Mr. Karlbeck O.S.—Professor Sirén.

3	

Prehistoric pottery from Kansu

A. Period I, Ch'i Chia Ping. Unpainted vase.

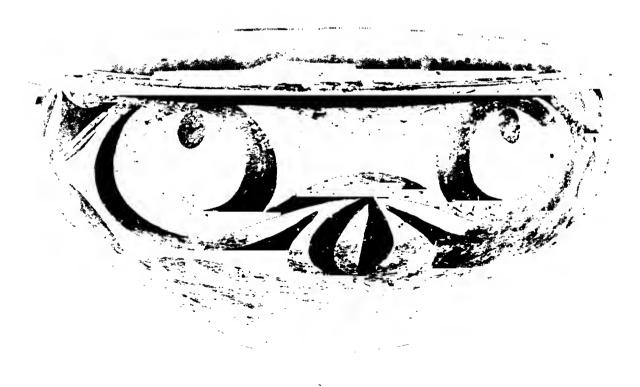
E.A.C. (J.G.A.).

B. Period I, Ch'i Chia Ping. Unpainted vase.

Musée Cernuschi. C. Period II, Yang Shao. Painted bowl.

Ex Wannieck Coll.



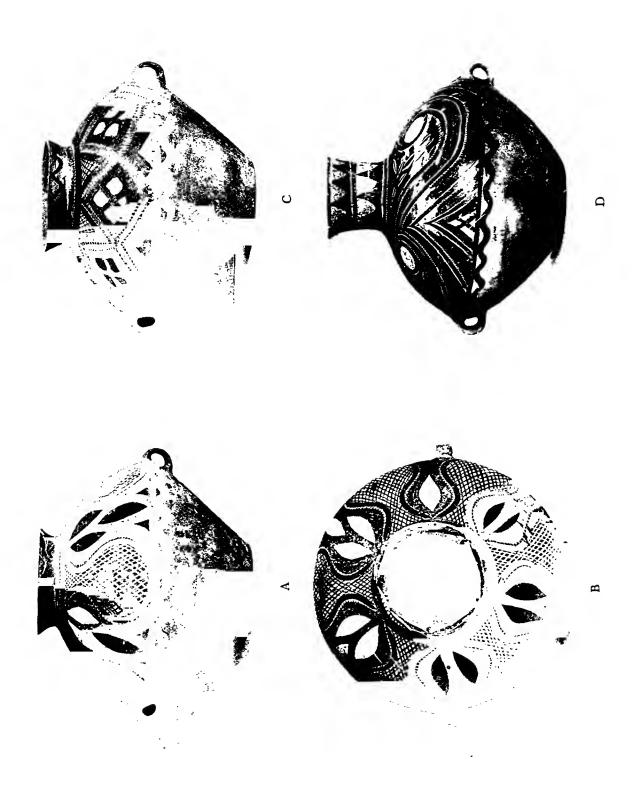




Painted prehistoric pottery from Kansu

A, B, C, D. Period II, Yang Shao. Three jars.

E.A.C. (J.G.A.).



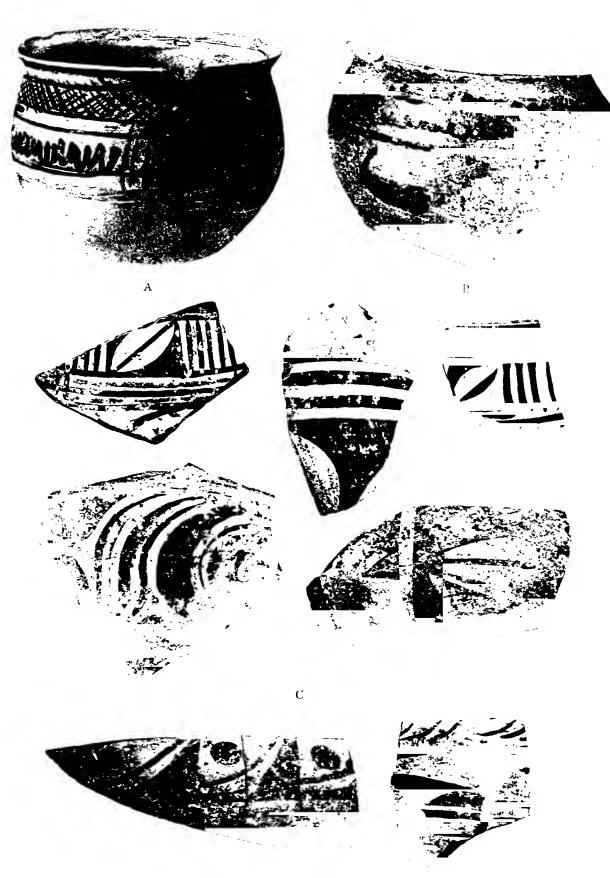


Painted prehistoric pottery from Honan

A, B. Period II, Yang Shao. Round pots painted on the clay in dark colours.

C, D. Period II, Yang Shao. Fragments of pottery with ornaments on white ground.

E.A.C. (J.G.A.).





Unpainted prehistoric pottery from Honan

A, B, C, D. Period II, Yang Shao, three jars and a ting-tripod.

E.A.C. E.A.C. (J.G.A.).





Painted prehistoric pottery from Kansu

A, C. Period III, Ma Ch'ang. Large jar and a small bowl.

Ex Wannieck Coll.

B, D. Period III, Ma Ch'ang. Two jars. E.A.C. (J.G.A.).





Painted prehistoric pottery from Kansu
A, C, D. Period IV, Hsm-tien. Three jars.

Wannieck Coll.

B. Period IV, Hsin-tien. Jar.

E.A.C. (J.G.A.).





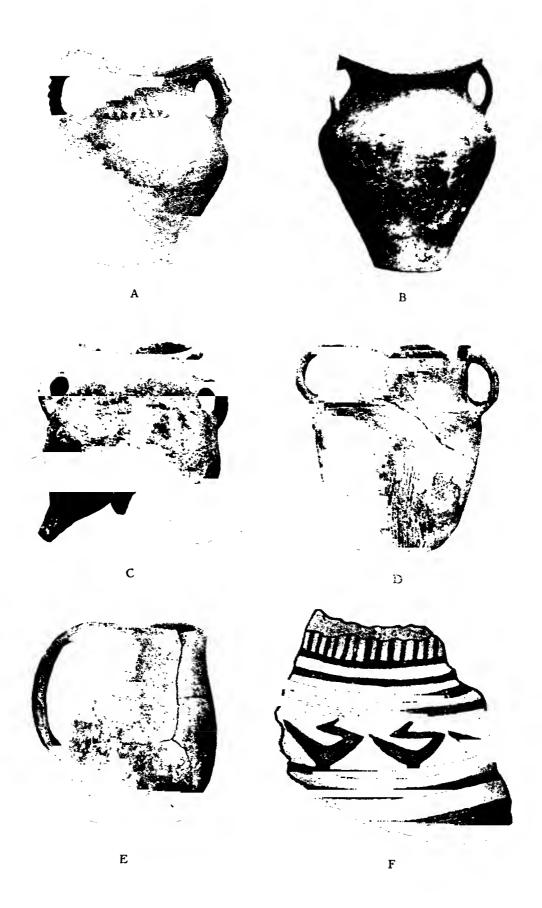
A, B, C. Period V, Ssü Wa. Two jars and a tripod.

E.A.C. (J.G.A.).

D, E, F. Period VI, Sha Ching. Two jars and a fragment of ornament.

E.A.C. (J.G.A.).

3





Carved ornaments in bone from An Yang hsien

A. Ssu pi (with Chinese inscription).

E.A.C. (0.5.).

B. Fragment of a handle.

E.A.C.

C. End-piece of a handle.

The University Museum, Kyoto.

D. Ssu pi (6) with carved ornaments.

Comtesse de Béhague Coll., Puris.



D



Carved ornaments in bone from An Yang hsien (f)

A. Fragment of a Ssu pi (f)

Dogsie

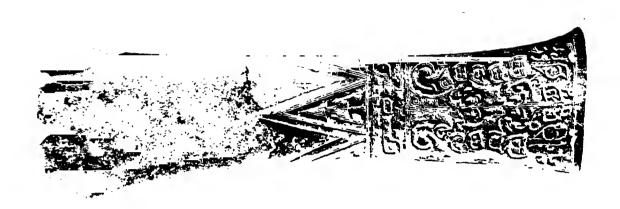
David Weill Coll.

B. Fragment of a handle.

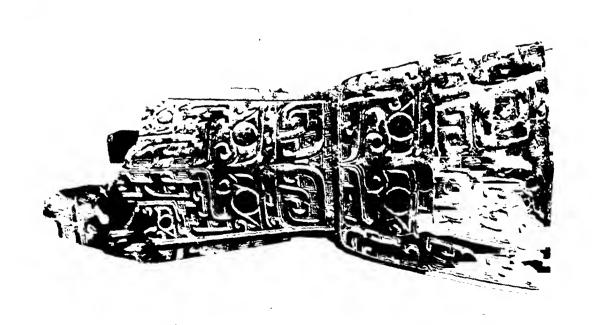
The University Museum, Kyoto.

C. Fragment of a flat handle.

C. T. Loo & Co.







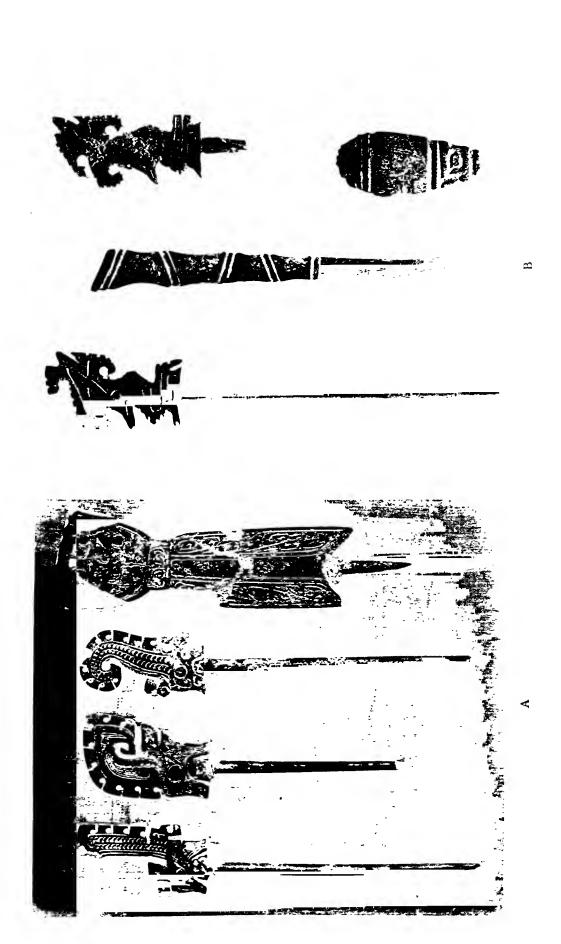


A. Carved cap pins of bone from An Yang hsien.

E.A.C.

B. Carved cap pins of bone from An Yang hsien.

E.A.C. (0.5.).





Carved ornaments in bone from An Yang hsien

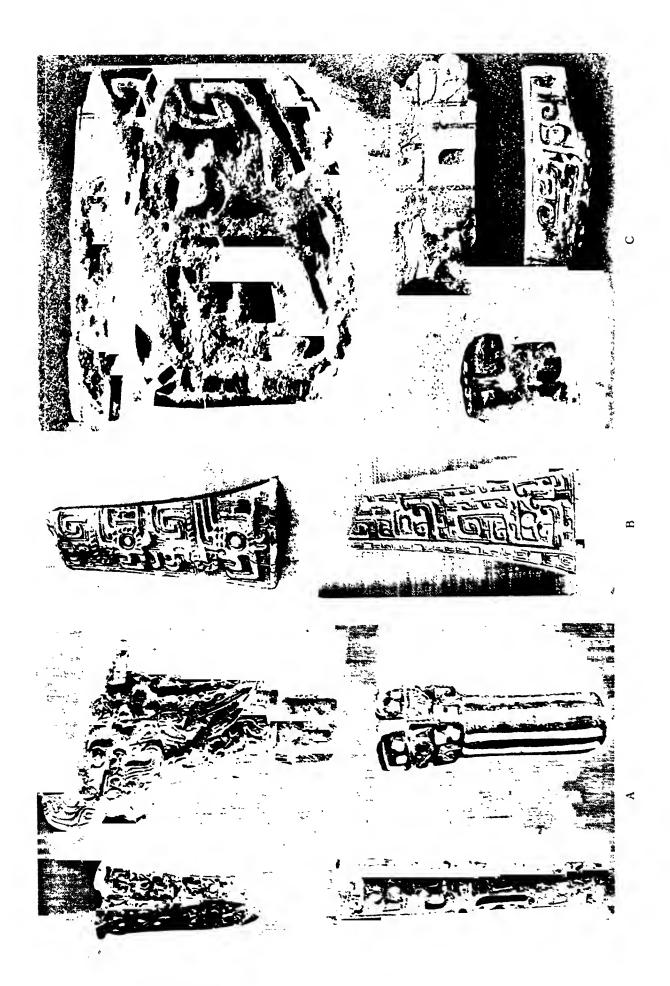
A. Fragments of handles, etc.

E.A.C.

B. Fragment of Ssu pi (1)

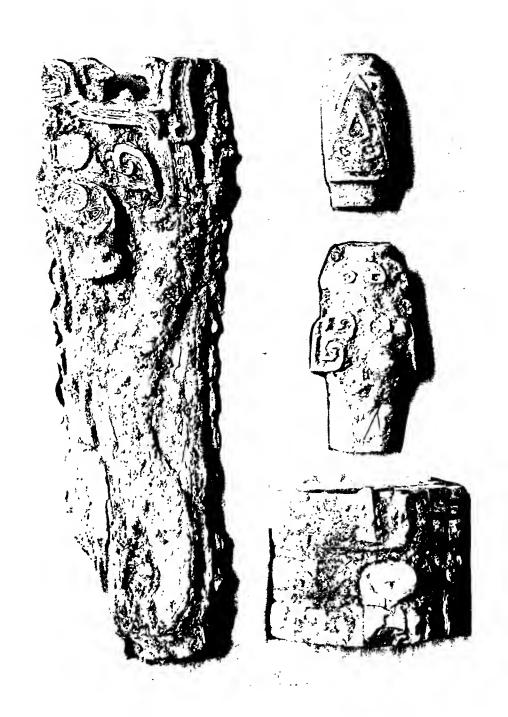
C. T'ao t'ie mask and other fragments.

The University Museum, Kyoto.





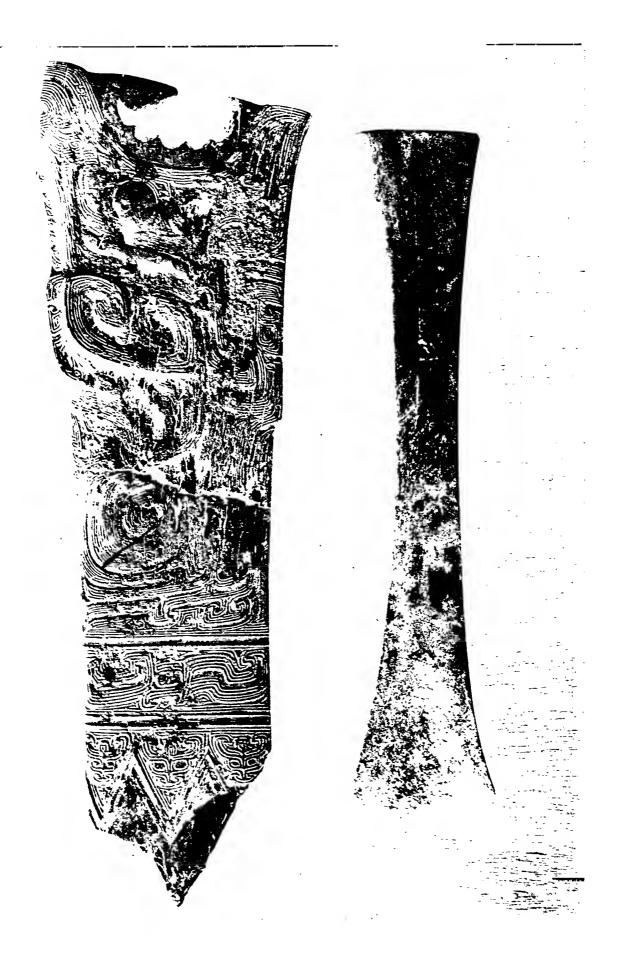
Carved ornaments in bone. H.R.H. the Crown Prince of Sweden.





Carved ornaments in bone.

Royal Ontario Museum, Toronto.





A. Carved ram's head in marble from An Yang hsien.

E.A.C.

B. T'ao t'ie head carved in ivory.

Louvre.







A. Fragments of an ornamental bronze vessel inlaid with turquoise, from An Yang hsien.

E.A.C.

B. Fragment of bronze handle inlaid with turquoise.

Alphonse Kahn Coll.



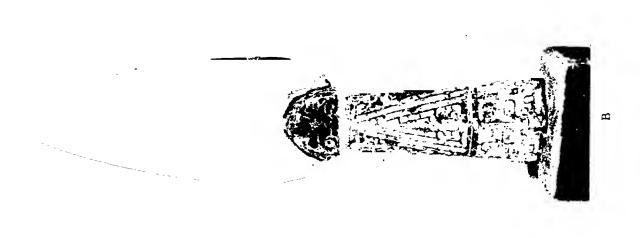


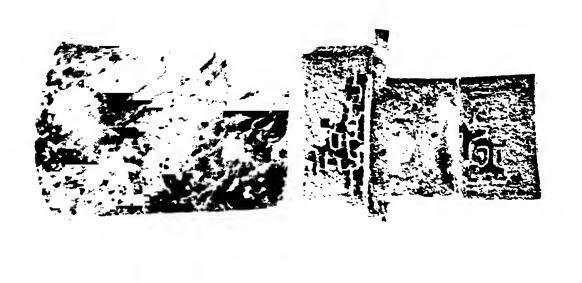
A. Jade ko with bronze handle inlaid with turquoise.

David Weill Coll.

B. Jade dagger with bronze handle inlaid with turquoise.

Oscar Raphael Coll.







A. Jade knife with ornamented bronze handle.

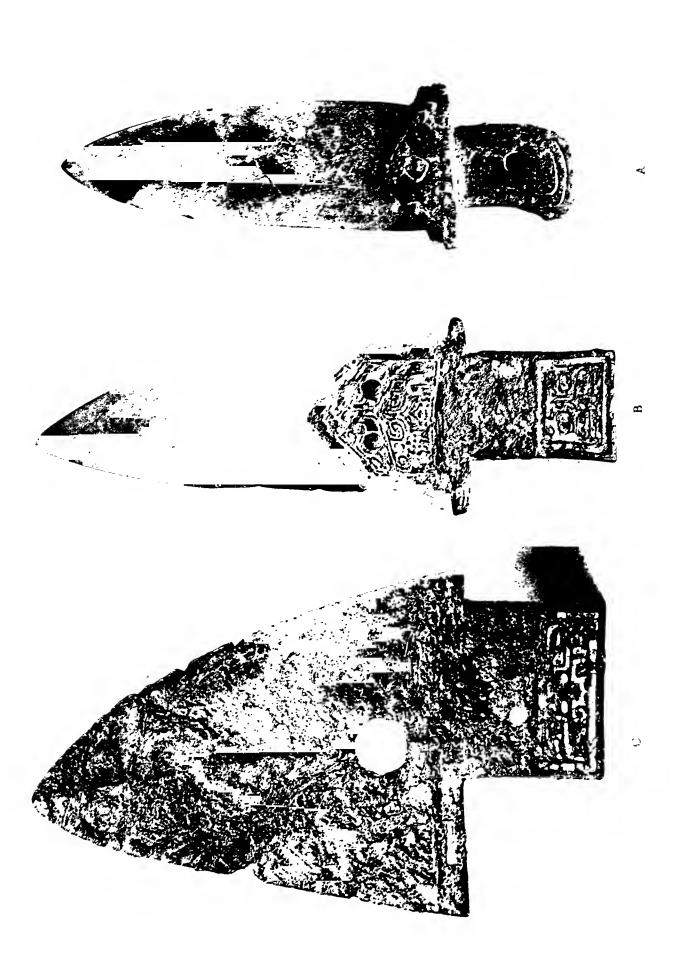
C. T. Loo & Co.

B. Jade knife with ornamented bronze handle.

Louvre.

C. Bronze ko with turquoise inlay.

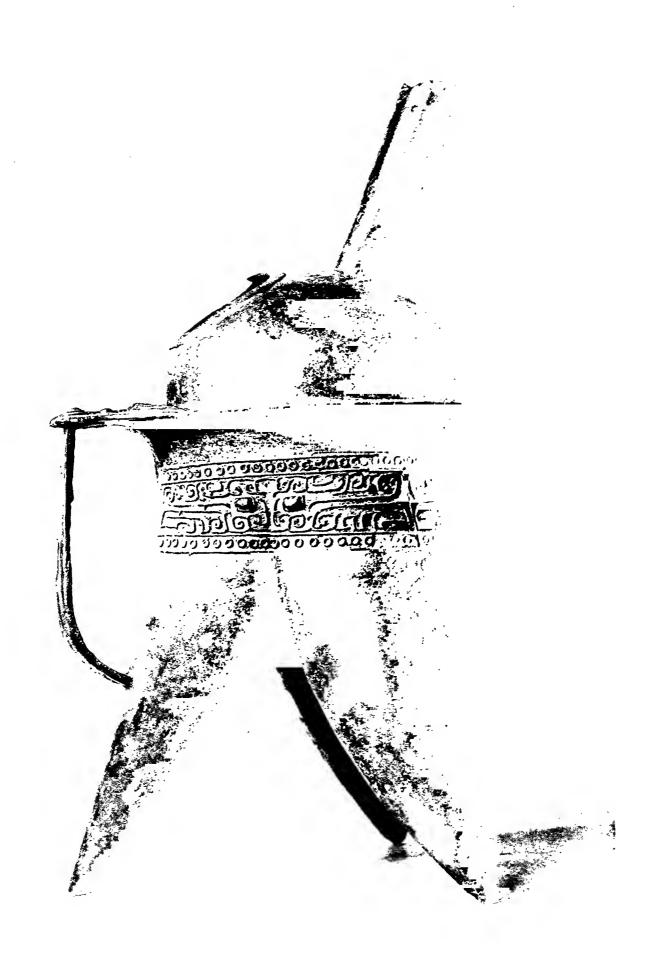
Eumorfopoulos Coll.





Bronze tripod.

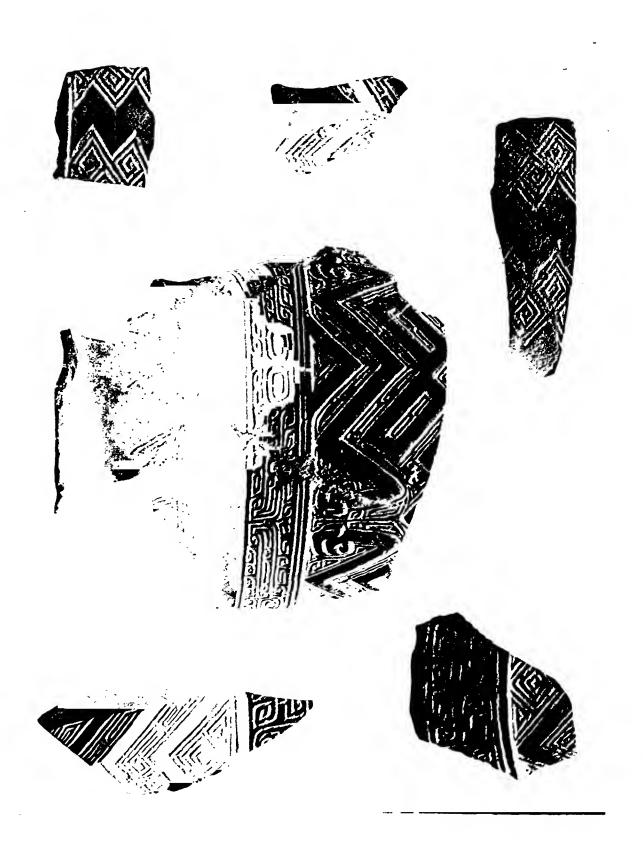
Staatl. Mus., Berlin.





Fragments of carved white pottery.

E.A.C. (0.3.).





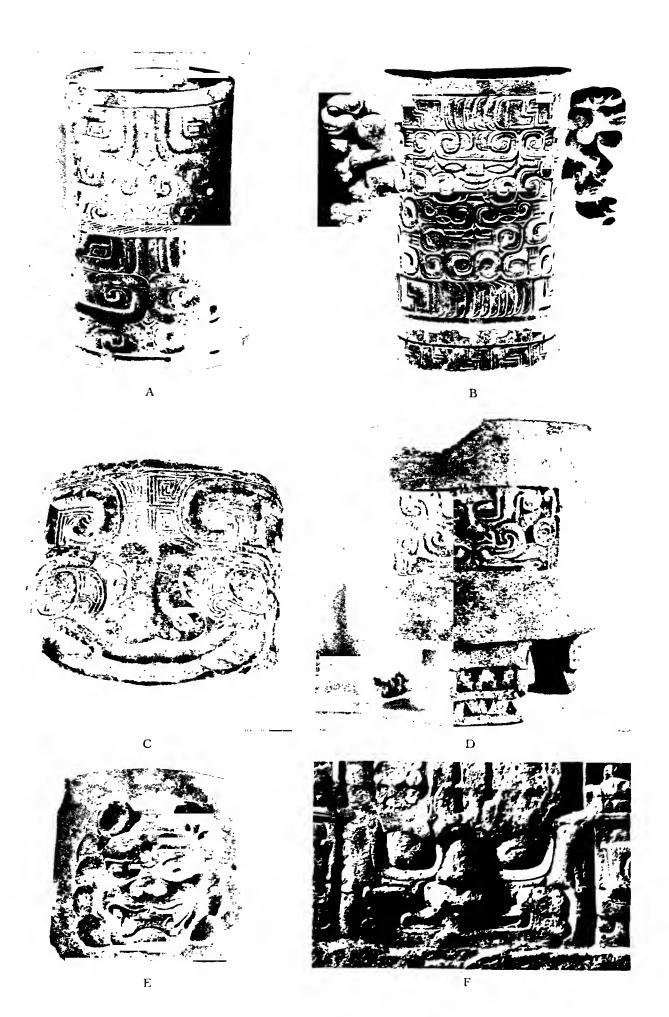
- A. White jade tube. Early Chinese.

  Eumorfopoulos Coll. B. Carved marble vase from the Ulua valley, British Honduras,
  - Univ. Mus., Philadelphia.
- C. T'ao t'ie head in marble. Early Chinese.
  Sirén Coll.
- D. Ornamented pottery vase from Quiche, Guatemala.
- Guaternala.

  Peabody Mus., Cambridge, U.S.A.

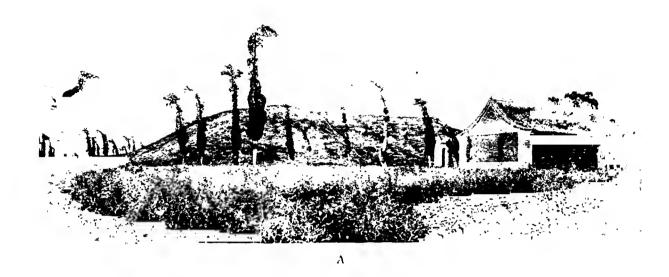
  E. T'ao t'ie head in terra cotta. Early Chinese.

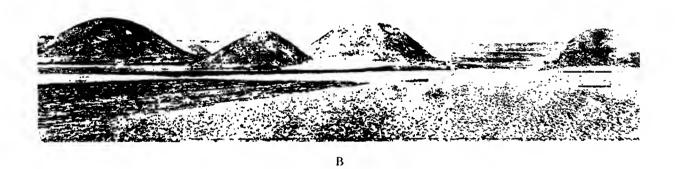
  Private Collection, Shanghat.
- F. Lower part of stela. Quirigua, Guatemala.





- A. View of the tomb of Duke Wen Wang, Hsien Yang. Shensi.
  B. View of some tombs at Kung Ling, Hsien Yang, Shensi.
  C. View of Emperor Shih Huang-ti's tomb at Lin Tung, Shensi.



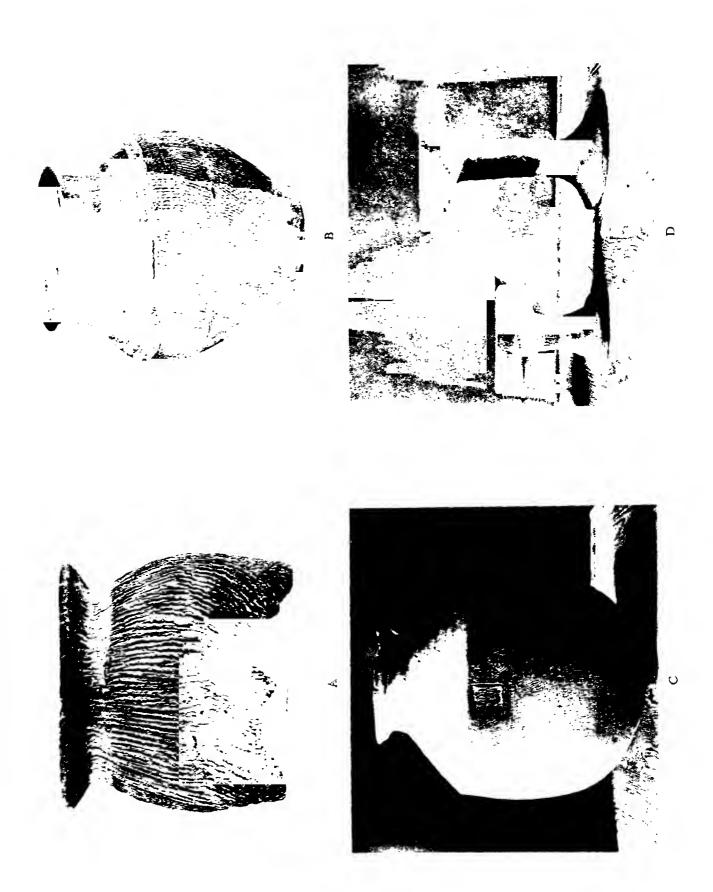






A, B, C, D. Specimen of unpainted pottery from the Chou dynasty.

E.A.C.





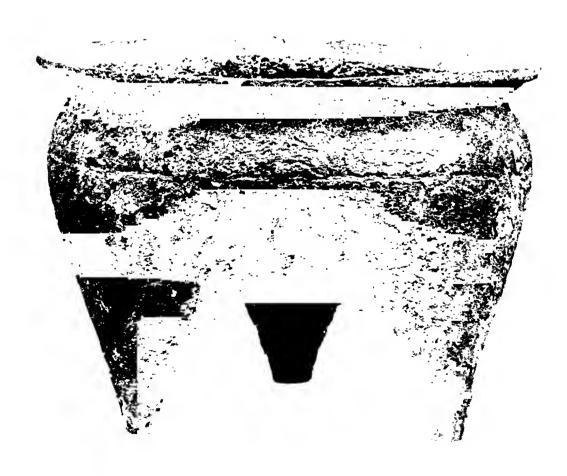
A. Ornamented li-tripod in bronze.

Sumitomo Coll.

B. Plain li-tripod in bronze.

Metropolitan Museum.

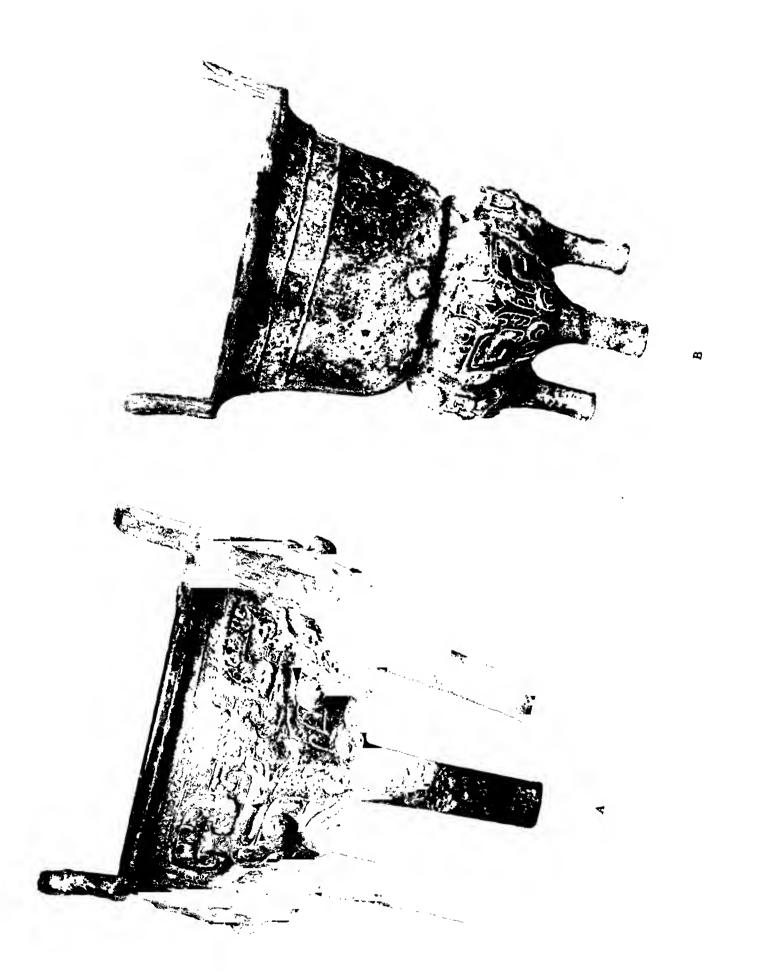






- A. Ting-tripod with t'ao t'ie heads.
- B. Cauldron on a tripod (hsien).

Sumitomo Coll.





A pair of ting-tripods.

Dr. O. Burchard, Berlin.

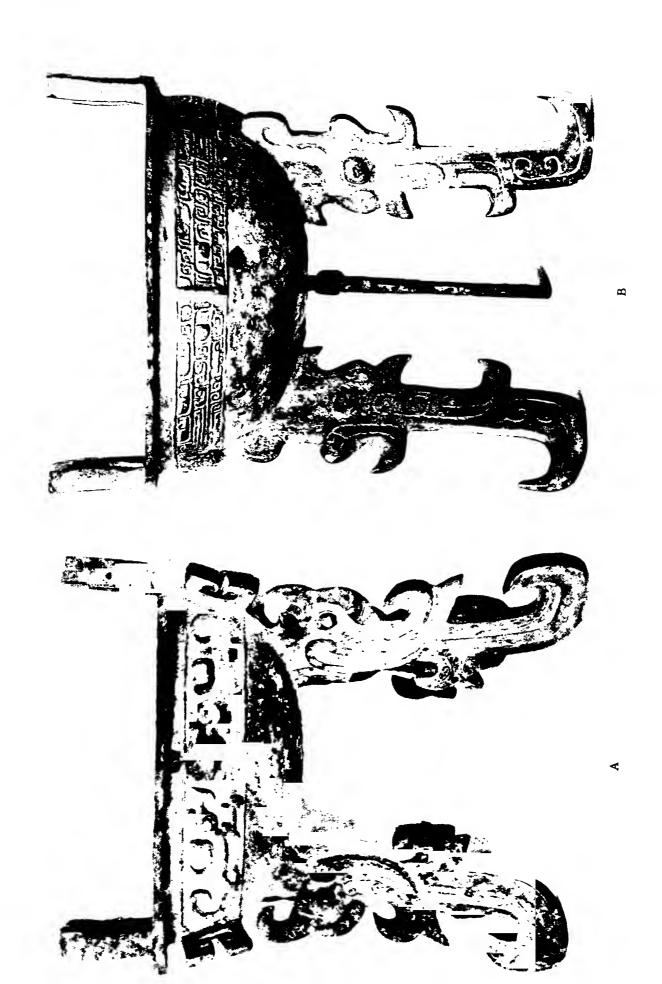




A. Tripod on dragon-like feet.

B. Tupod on dragon-like feet.

Ex Coll. Worch, Berlin.





Tut or I vessel with four handles.

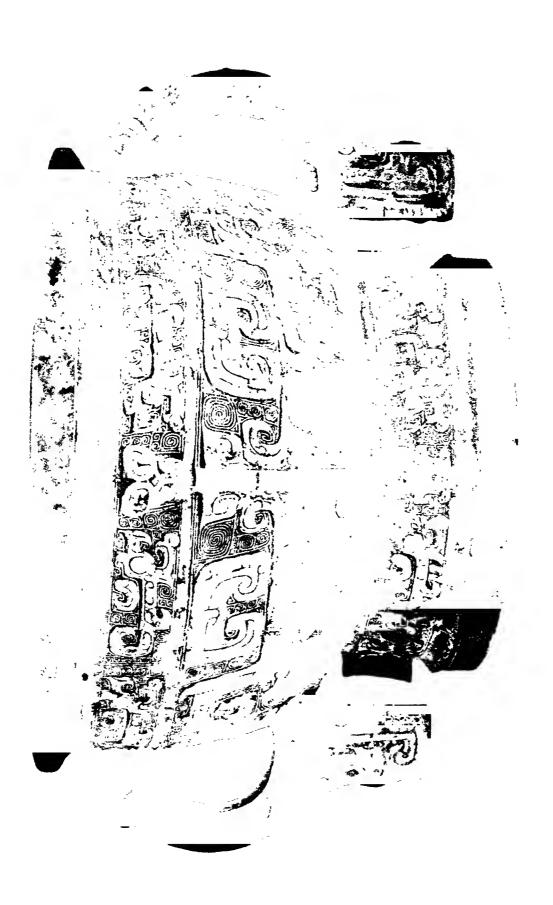
Eumorfopoulos Coll.





Tut or I vessel. PLATE 29

Sumitomo Coll.





Tsun vase. PLATE 30

C. T. Loo & Co.

•





Tsun vase.

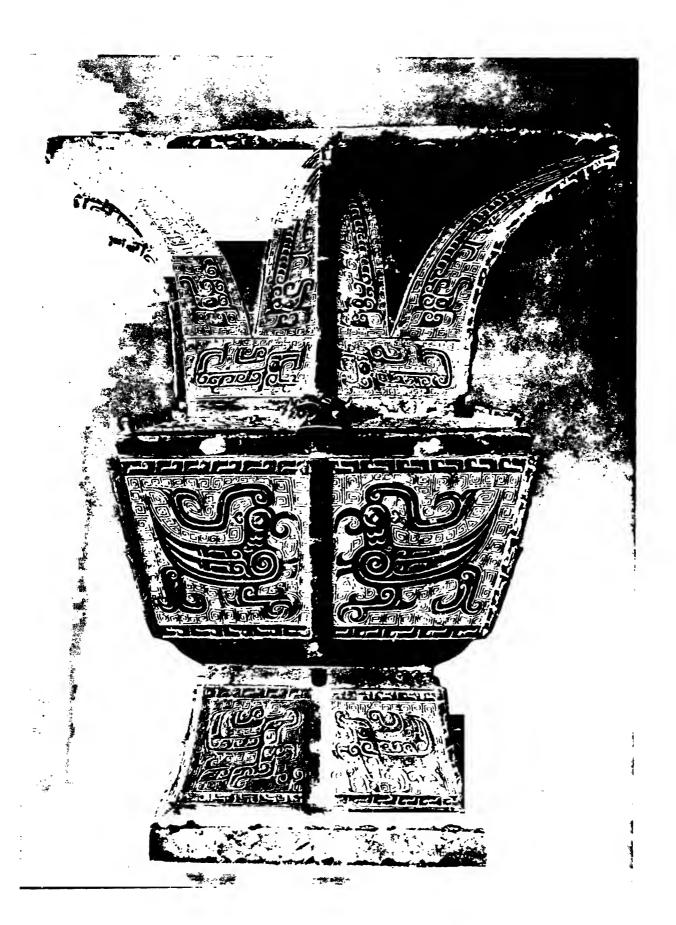
The Art Institute, Chicago.





Quadrangular tsun.

Freer Gallery of Art, Washington, D.C.





- Lei unn

Metropolitan Museum.

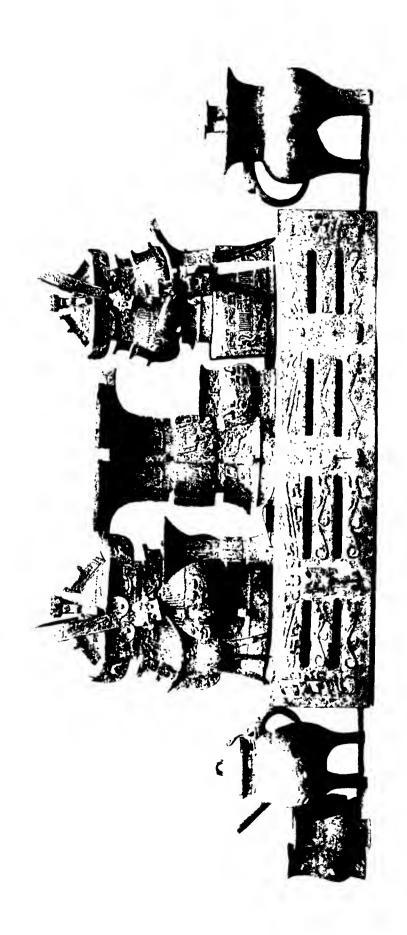


Charles and respect



Set of vessels for sacrifices, from Pao Chi hsien.

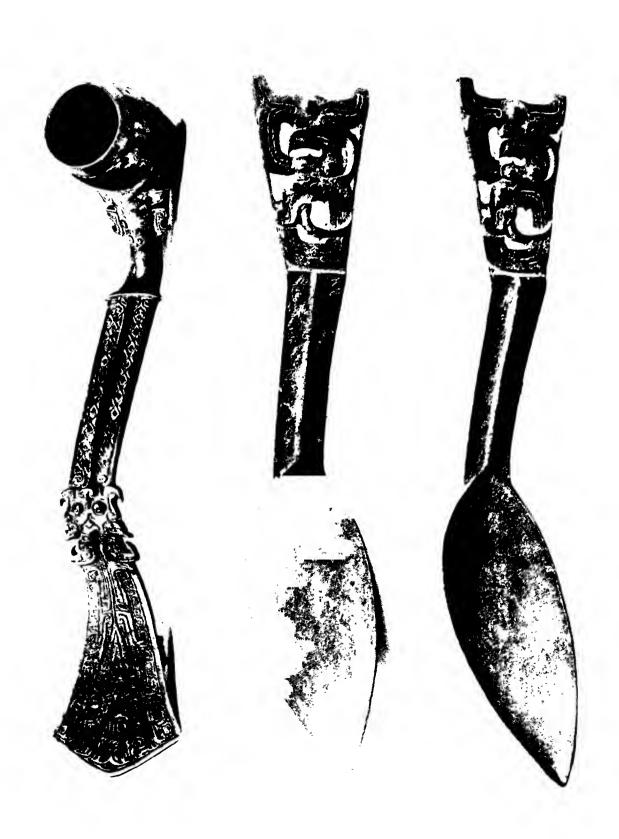
Metropolitan Museum,





A ladle and two spoons from the Pao Chi hsien set.

Metropolitan Museum.





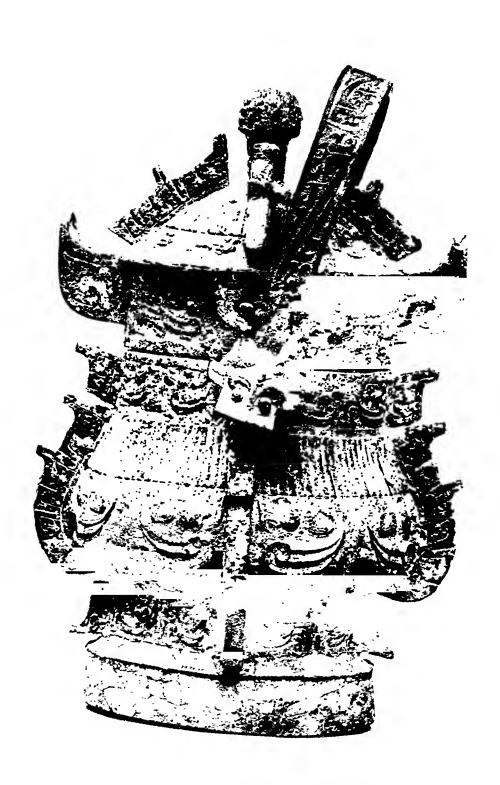
Tsun from the P20 Chi hsien set. (See Plate 34.)
Metropolitan Museum.





Yā from the Pao Chi haien set. (See Plate 34.)

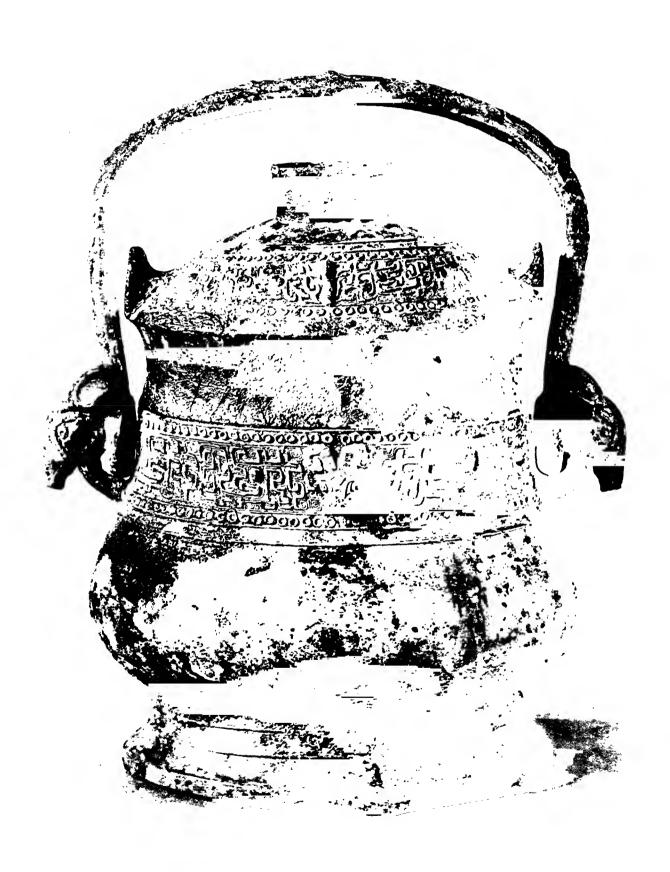
Metropolutan Museum.





Museum of Fine Arts, Boston.

Υū.





A. Chia from the Pao Chi hsien set.

B. Ho from the Pao Chi hsien set.

Metropolitan Museum.





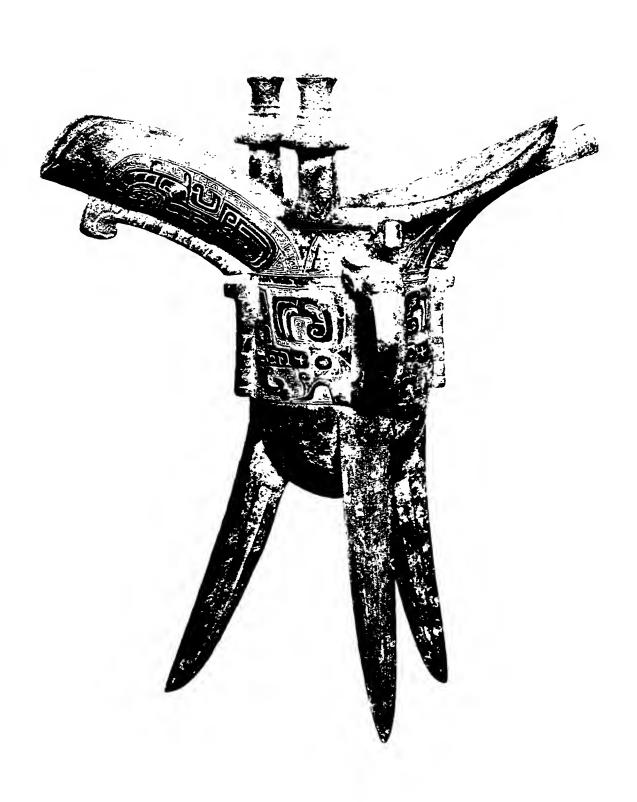
Chia. Freer Gallery, Washington, D.C.





Chio from the Pao Chi hsten set.

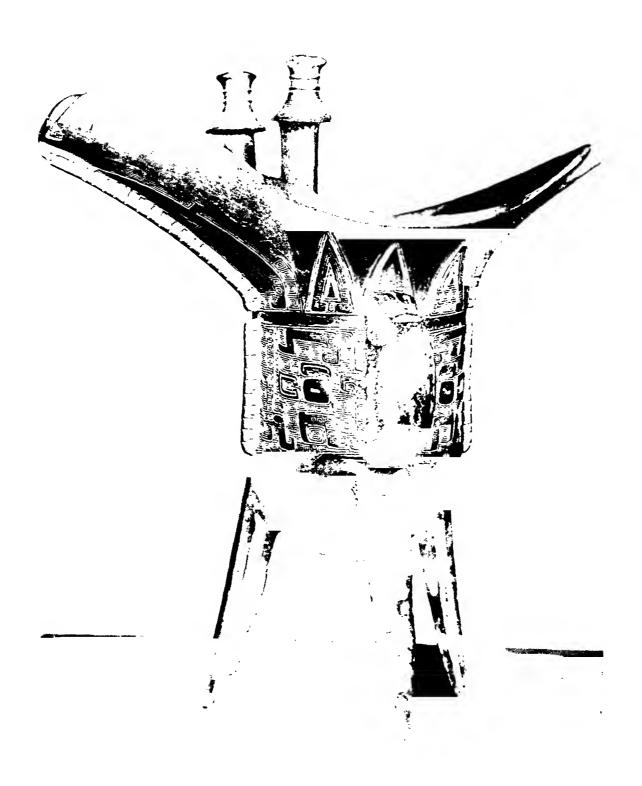
Metropolitan Museum.





Chio.

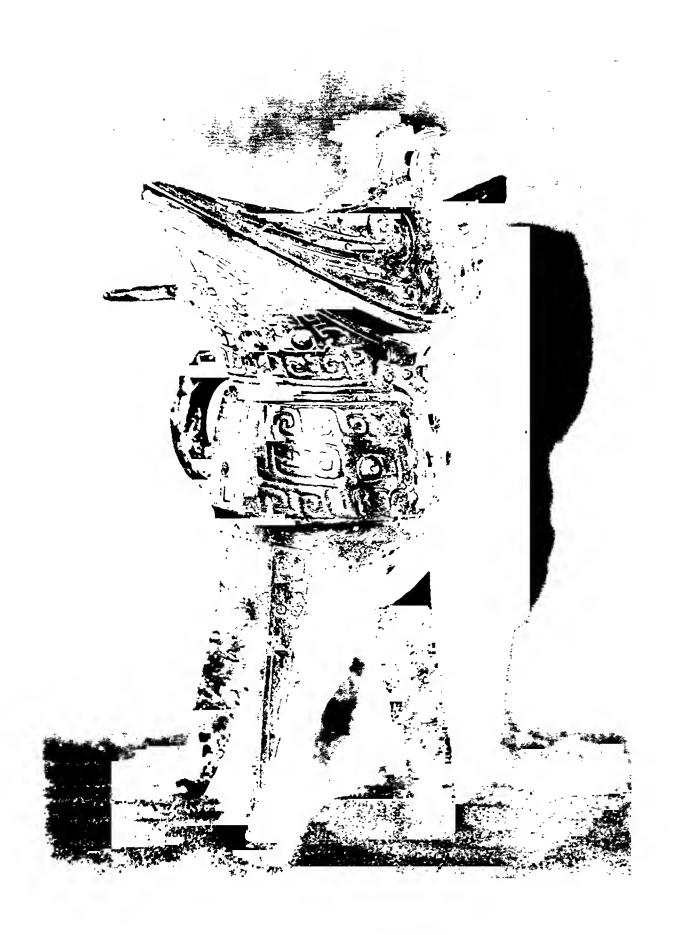
Freer Gallery, Washington, D.C.





Chio with lid in the form of a bird.

Mrs. C. R. Holmes Coll., New York.



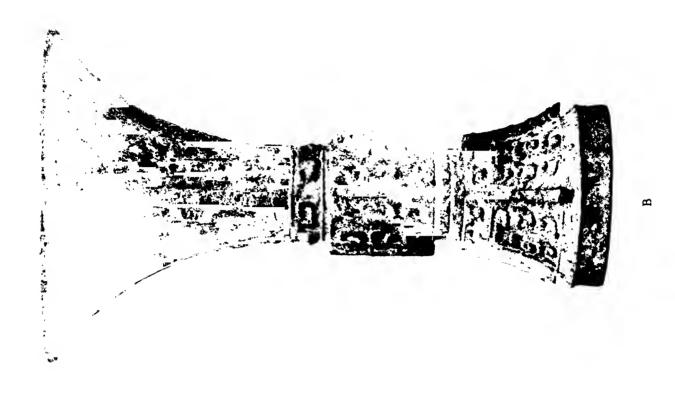


A. Ku-shaped vase.

Ex Coll. Ton Ying Co., New York

B. Ku from the Pao Chi hisen set. (See Plate 34.)

Metropolitan Museum.







Chih (a wine cup) from the Pao Chi hsien set. (See Plate 34.)

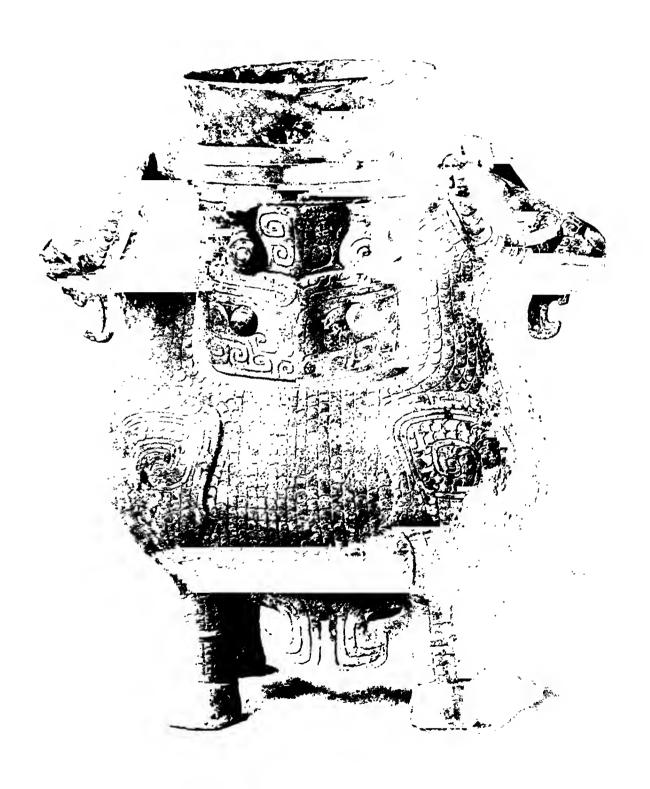
Metropolitan Museum.





Sacrificial vessel consisting of two rams supporting a vase.

Eumorfopoulos Coll.





A. Sacrificial vessel in the shape of an owl.

Ex Coll. Peytel, Paris.

B. Yil in the shape of two owls.

Sumutomo Coll.







Sacrificial vessel in the shape of an owl.

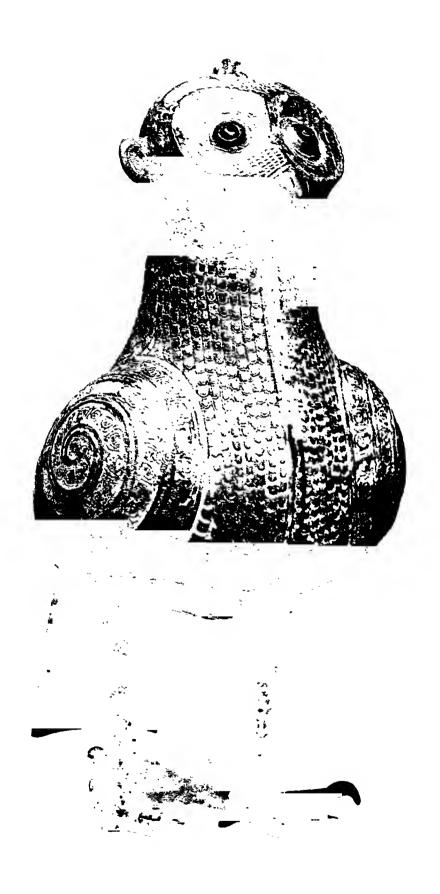
Eumorfopoulos Coll.





Sacrificial vessel in the shape of an owl

Mr. and Mrs. Wood-Bliss Coll., New York.





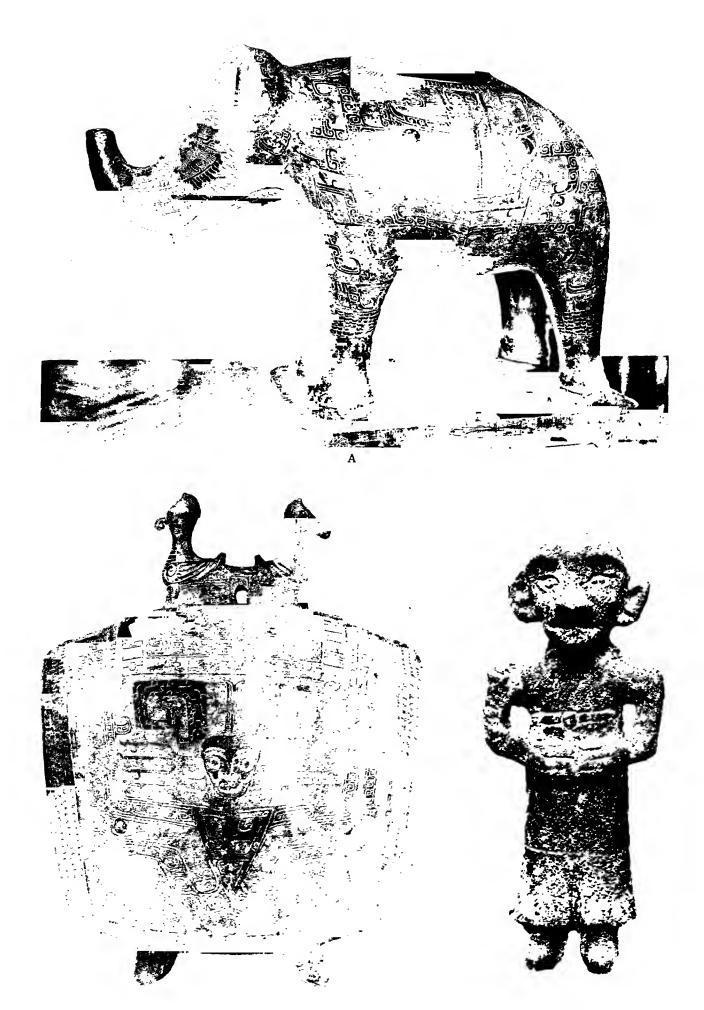
- A. Sacrificial vessel in the shape of an elephant.

  Camondo Coll., Louvre.
- B. Bronze drum with human mask.

Sumitomo Coll.

C. Bronze statuette of a man.

Private Collection, New York.



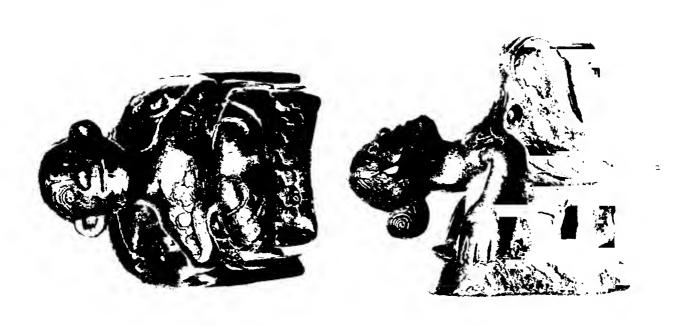


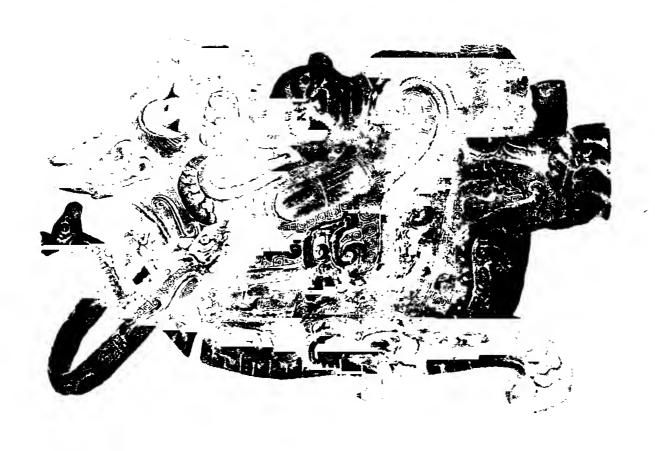
A. Yff in the shape of a monster with a human figure in its jaws.

Sumitomo Coll.

B. Axle cap with a human figure.

Free Gallery, Washington.







Bronze bell.

H.R.H. the Crown Prince of Sweden.

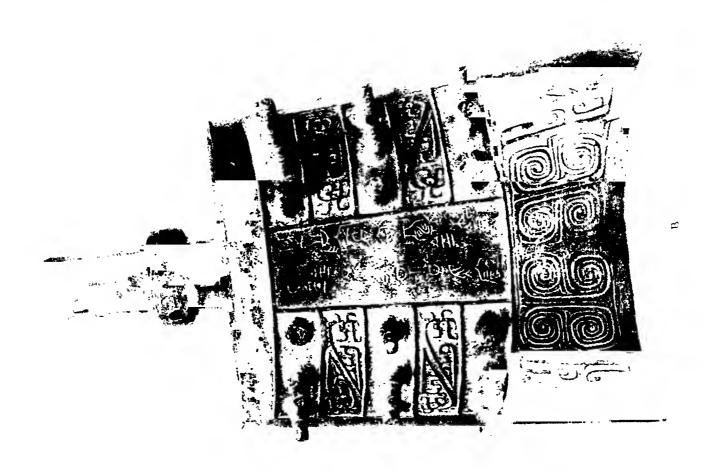


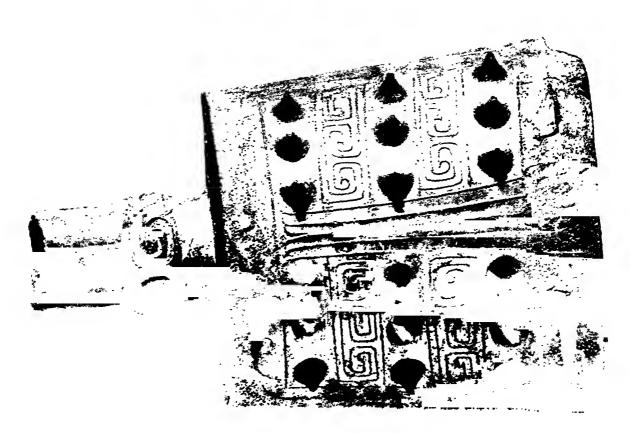


A. Bronze bell.B. Bronze bell.

The Art Institute, Chicago.

Sumitomo Coll.







Bronze vase (ha ?)

Ch. Vignier Coll.





Tut-shaped bronze vessel.

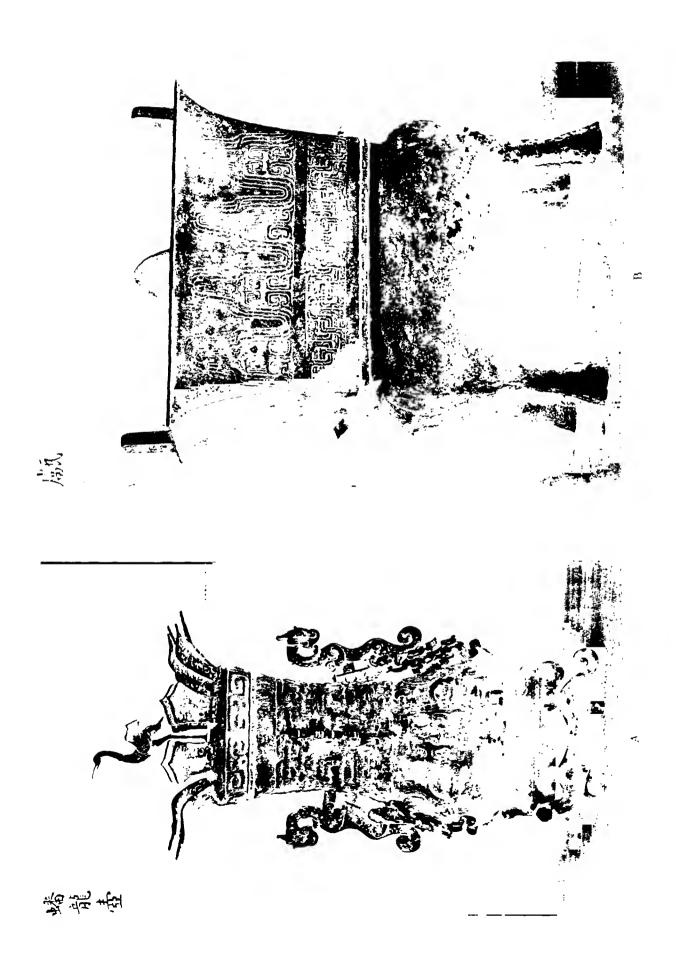
Eumorfopoulos Coll.





- A. Hu-shaped vessel from Hsin Cheng hsien, Honan.
- B. Hsien on four feet from Hsin Cheng hsien, Honan.

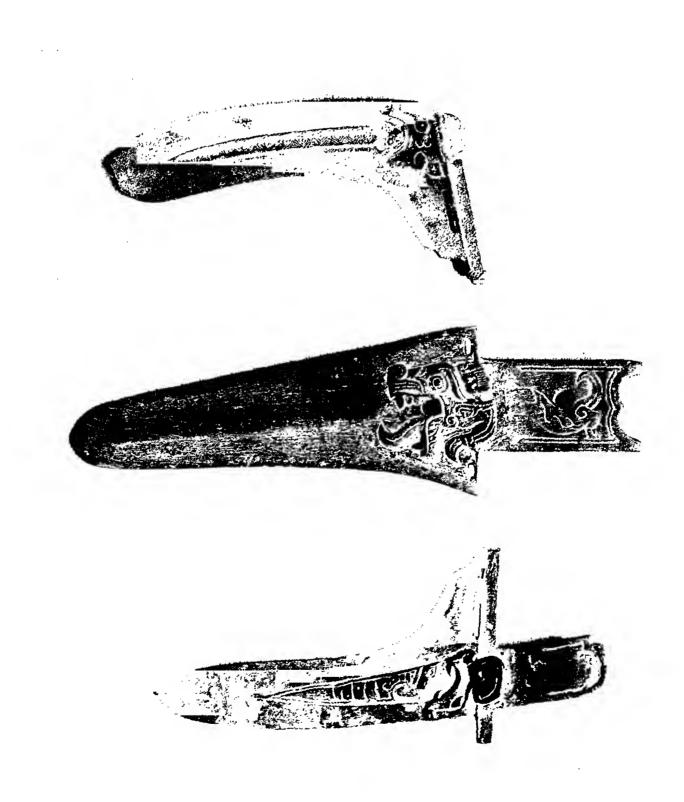
  The Museum in Kai-feng.





Three ornamented ko.

E.A.C. (0.5.).



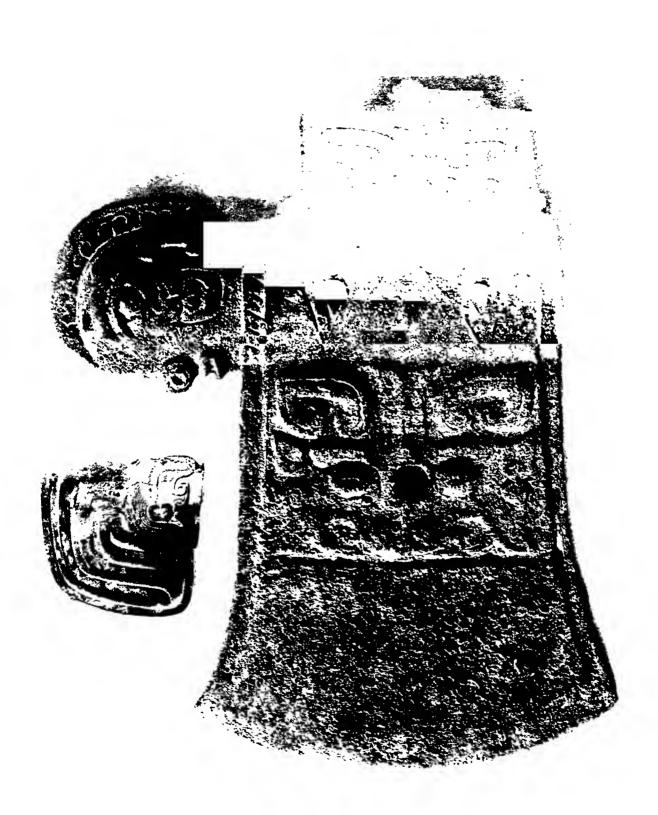


Bronze axe with human head.

Coll. of the late Ch. Rutherstone, London.

Helmeted head, probably from a similar axe.

Ex Coll. Dr. Burchard, Berlin.





A, B, C, F. Ornamented animal heads in bronze.

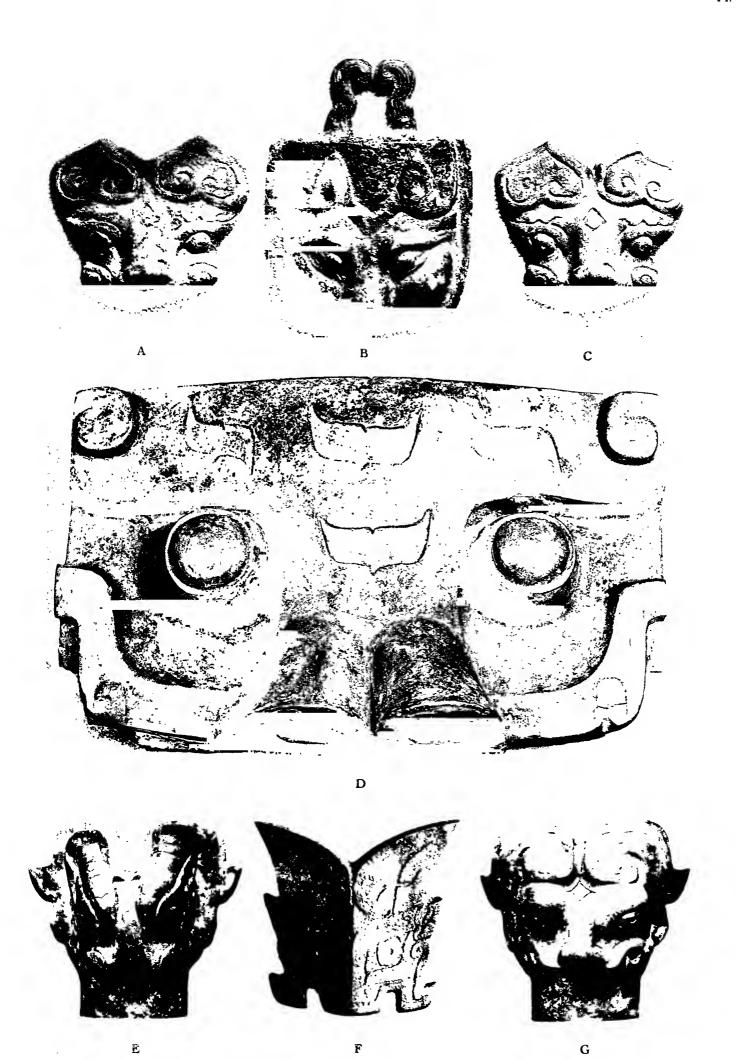
E.A.C. (0.s.).

D. Large double t'ao t'ie head in bronze.

The Art Institute, Chicago.

E, G. Ornamental ram's heads.

Private Collection, Shanghai.





- A. Bird-shaped foot from a bronze tripod.

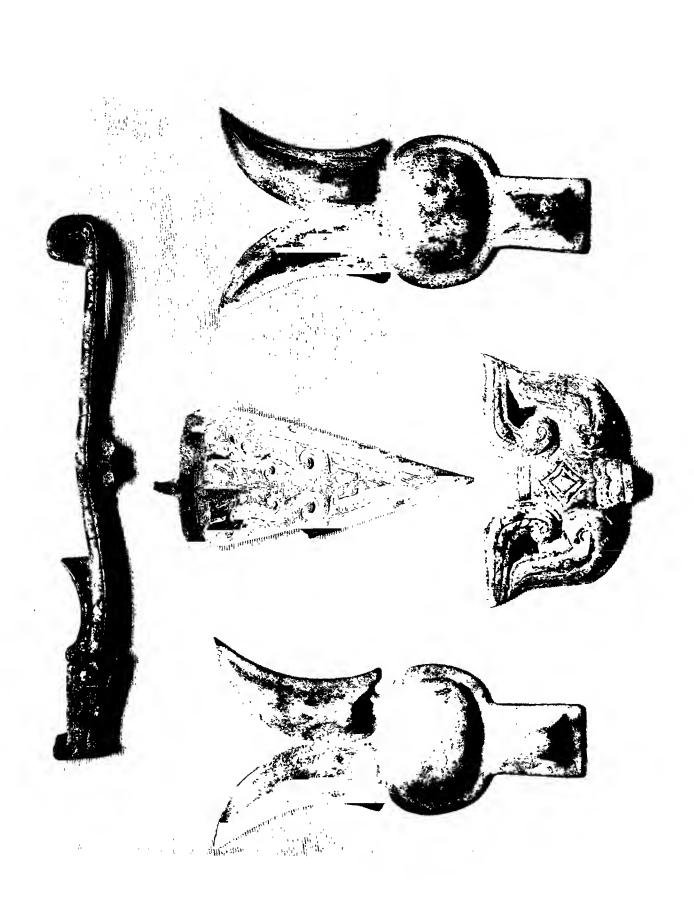
  David Weill Coll.
  B. Bronze ornament in the shape of a bird's head.
- C. Dragon-shaped bronze fitting.
- C. T. Loo & Co.





Ornamental bronze fittings.

E.A.C. (0.3.).





Two bronze plaques in the shape of seated animals.

H. Oppenheim Coll., London.

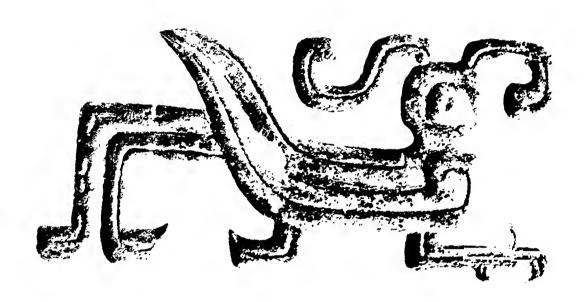


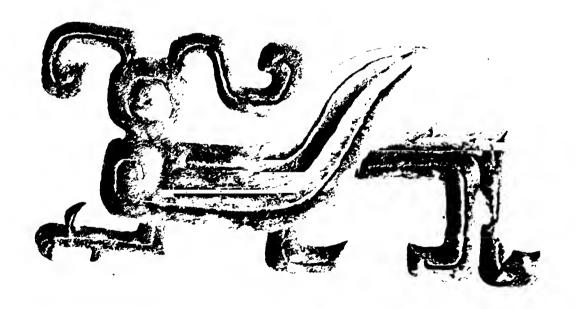




A pair of bronze plaques in the shape of winged animals.

David Weill Coll.



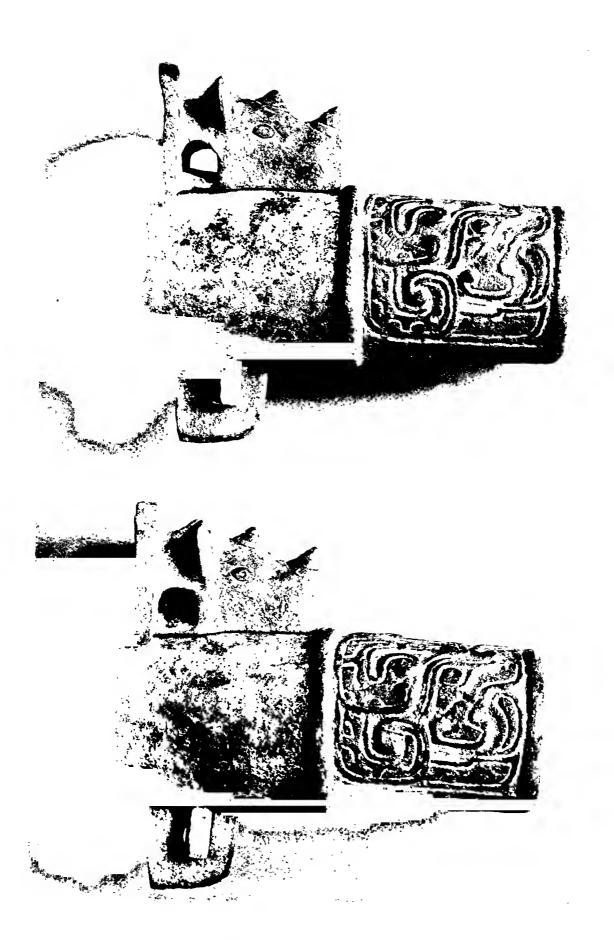




A pair of axle-caps with animal-shaped cross-pins.

J. Hellner Coll., Stockholm.

Ţ





A. A pair of tiger-headed bolts from axle-caps.

Ex Coll. Worch, Berlin.

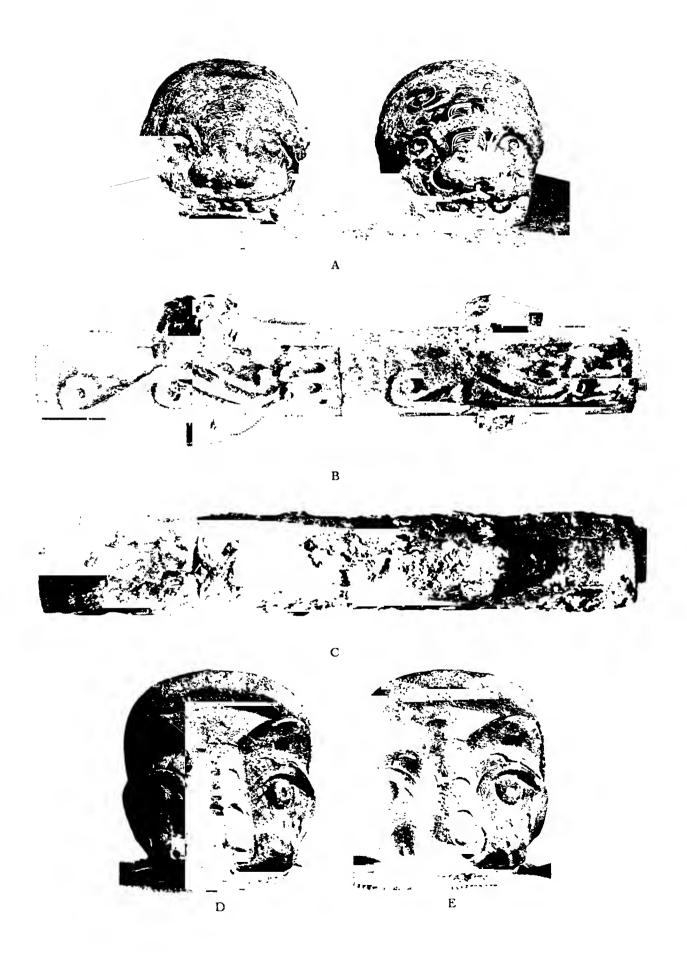
B, C. A pair of long axle-caps with two bolts.

J. Hellner Coll., Stockholm.

D, E. A pair of tiger-headed bolts from axle-caps.

E.A.C. (0.5.)

E.A.C. (o.s.).

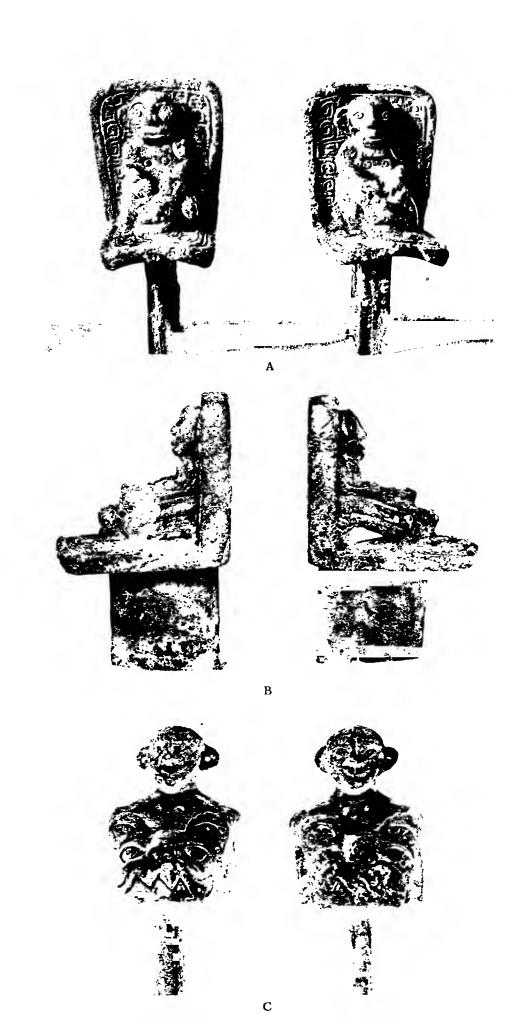




A, B. Front and side view of a pair of crossbolts from axle-caps with human figures. David Weill Coll.

C. A pair of cross-bolts with human figures.

Eumorfopoulos Coll.





- A. A pair of bronze fittings in the shape of coiled birds' necks.

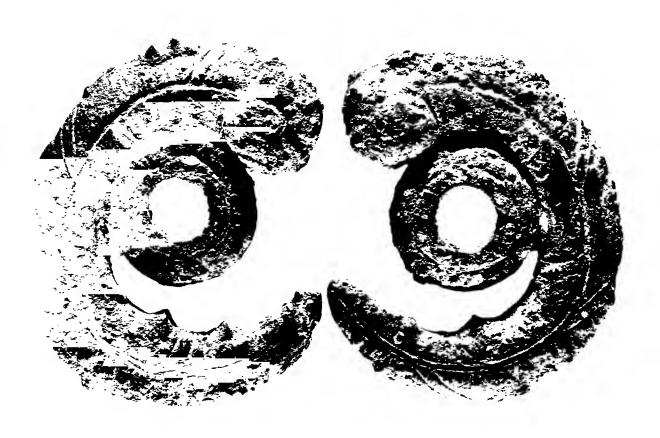
  B. A pair of crescent-shaped bronze fittings.

  E.A.C.





A



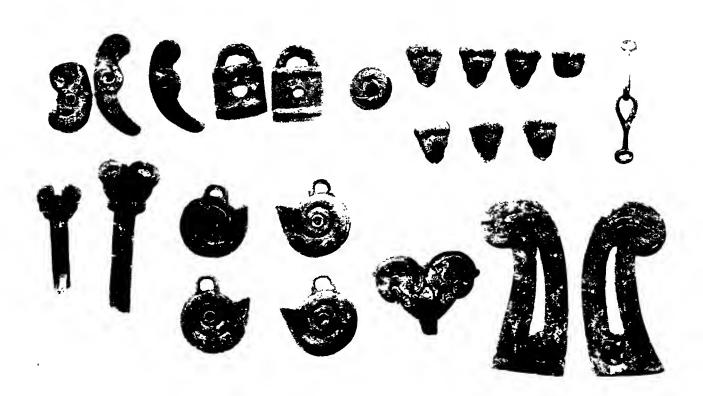


- A. A pair of bronze fittings in the shape of coiled dragons.
- B. A series of bronze fittings, possibly from horse trappings. Royal Ontario Mus., Toronto.





A

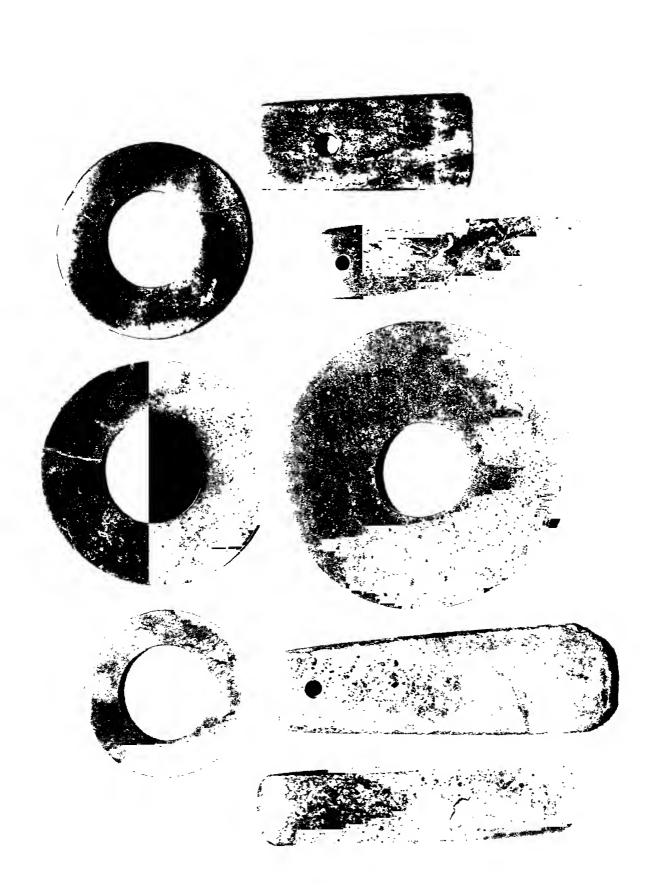




Ritual jades (kuei, pi, yuan).

E.A.C. (0.\$.).

.





- A. Coiling dragon in jade.

  B. Jade ring (pi).

Dr. Gieseler Coll.





A, B. Ts'ung-shaped jades.

C, D. Ts'ung-shaped jades.

Dr. Gieseler Coll.

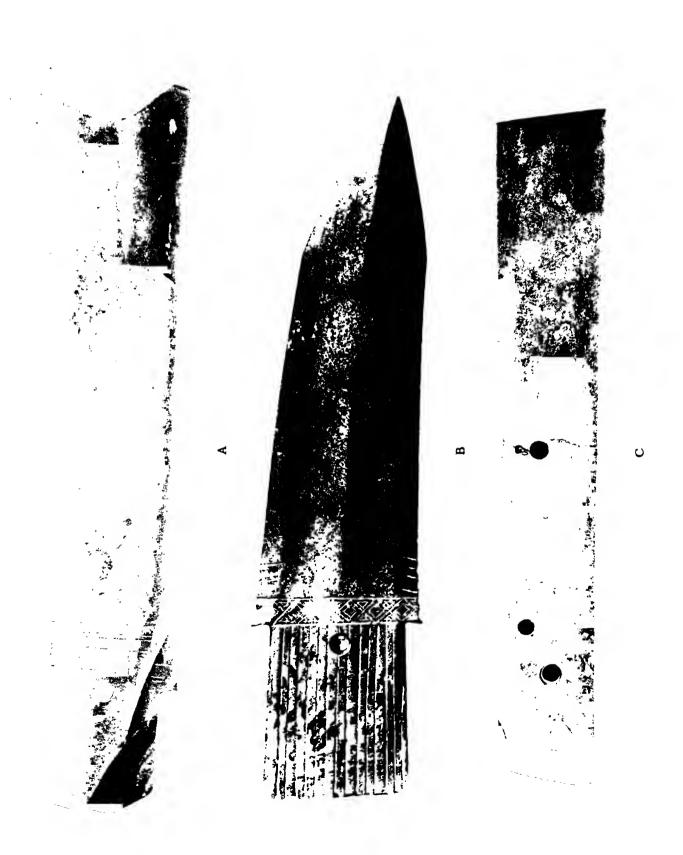
E.A.C. (o.s.)





- A. Ko-shaped jade (known as kuei).
  B. Long jade knife.
  C. Rectangular jade knife.

C. T. Loo & Co.





Sacrificial jade emblems.

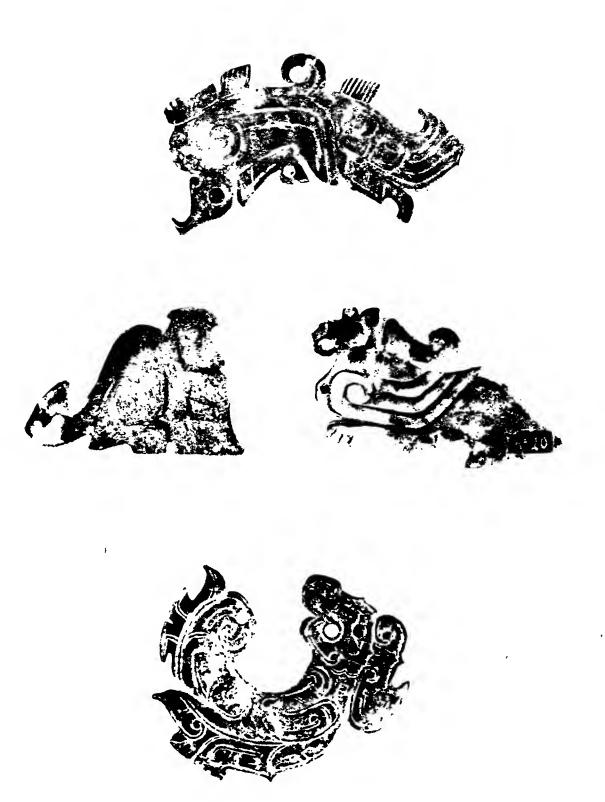
David Weill Coll.





Jade plaques in the shape of fantastic animals.

C. T. Loo & Co.





Small jade plaques in the shape of rabbits and of a bird.

C. T. Loo & Co.





A, B. Two ting from the Huai river valley.

E.A.C. (0.K.).



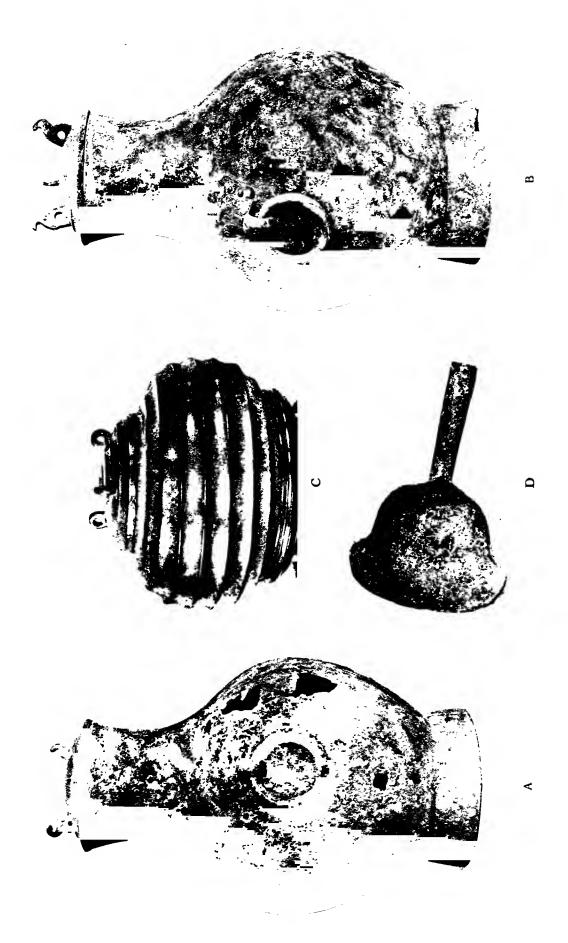


- A, B. Two hu-shaped vessels from the Huai river valley.

  C. Small round box with lid from the Huai river valley.

  D. Small ladle from the same set as the two hu.

  E.A.C. (O.L.).





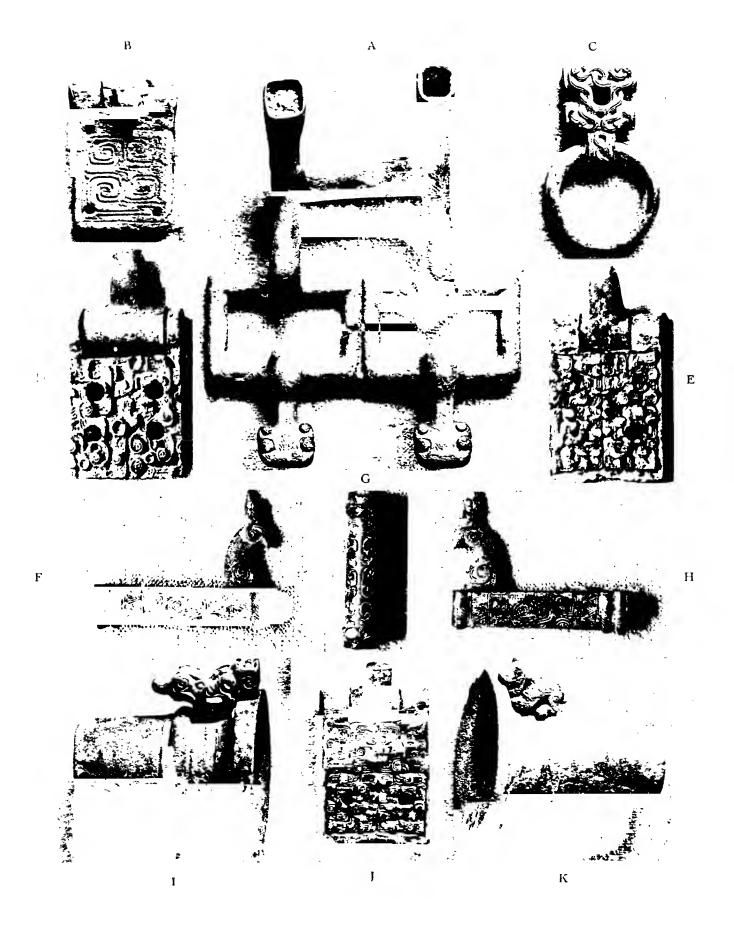
Hinges and ornamental fittings in bronze for carts, horse trappings, etc., from the Huai river valley.

A, B, C, F, G, H, I, J, K.

E.A.C. (0.5.).

D, E.

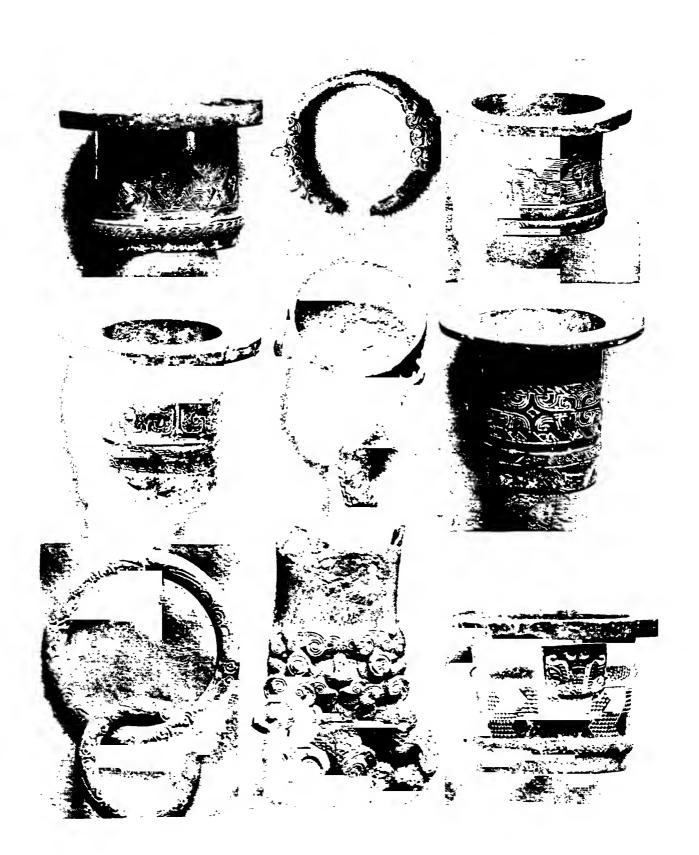
Hopp Museum, Budapest.





Axle-caps, ornamented rings and pole fittings from the Huai river valley.

E.A.C. (0.s.).

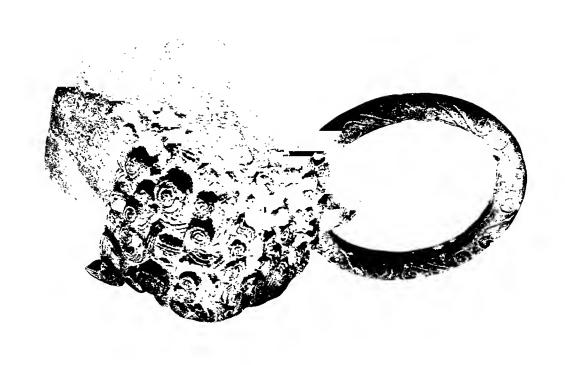




Two views of a finial (with a ring) for a shaft or a pole.

From the Huai river valley.

Hallwyl Coll. (0.x.).







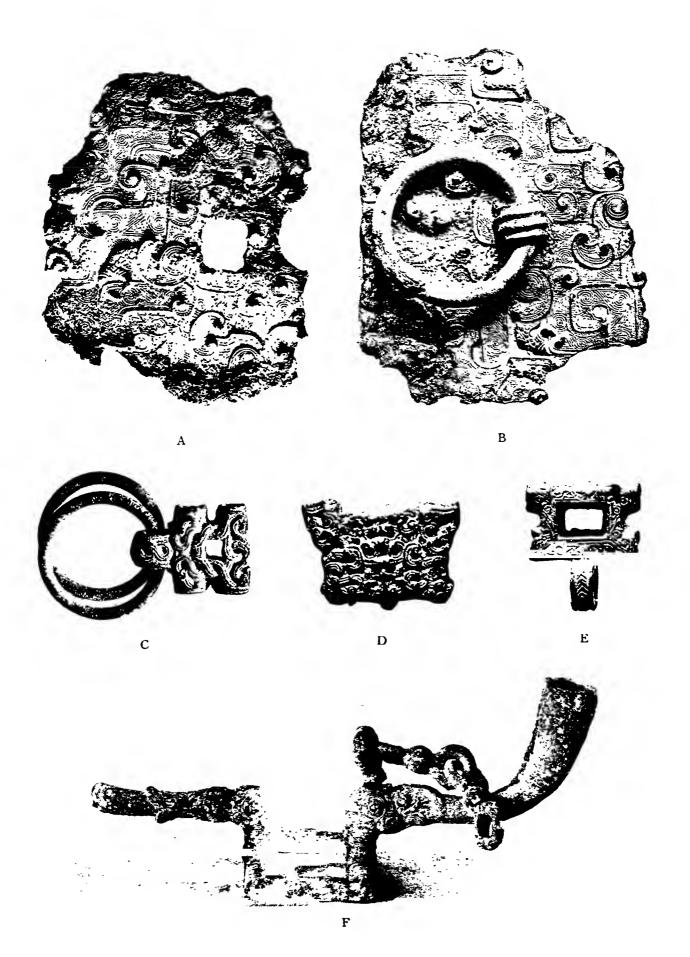
A. Fragment of a bronze vase with claw and spiral pattern. From the Huai river valley.

E.A.C. (o.s.).

B. Another fragment from the same vase.
C, E. Ring holders. From the Huai river valley.
D. Dagger hilt. From the Huai river valley.
F. Object of unknown use. From the Huai river valley.

Holland Col.

Hallwyl Coll. (O.K.).





Large mirror with spiral ornaments and octagonal star.
From the Huai river valley.

E.A.C. (0.5.).

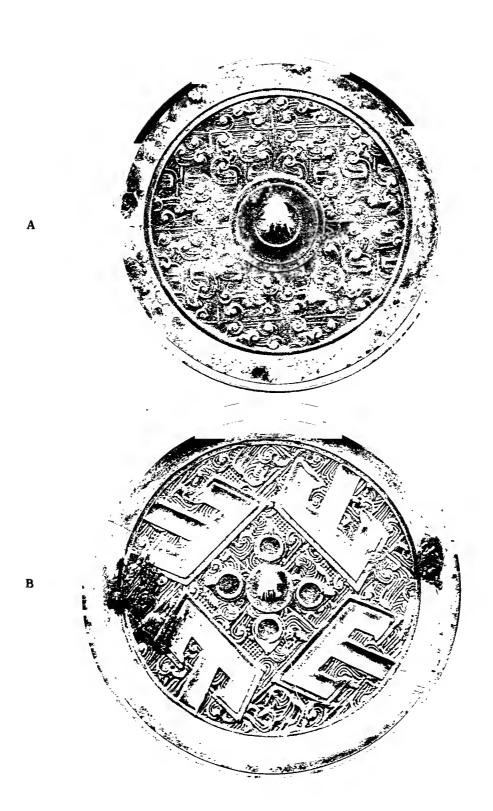




A. Mirror with claw and spiral pattern. From the Huai river valley.
 B. Mirror with T designs over a claw and spiral pattern. From the Huai river valley.

Halland Col.

Hallwyl Coll. (O.K.).





A. Mirror with conventionalized birds on a spiral and lozenge pattern. From the Huai river valley.

Worch Coll., Berlin.

B. Mirror with long-tailed dragons and a monster on a ground of lozenge pattern. From the Huai river valley.

E.A.C. (0.x.).



A



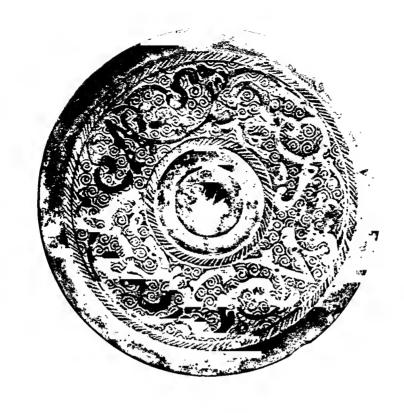


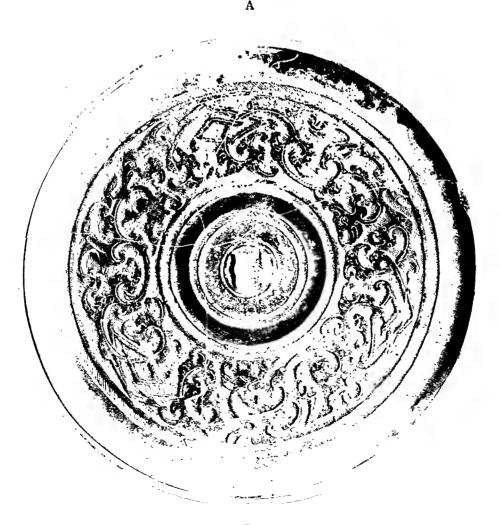
A. Mirror with dragon scroll on a ground of spirals.

E.A.C. (0.K.).

B. Mirror with dragon scrolls on a ground of spiral and lozenge pattern. From the Huai river valley.

Hallwyl Coll. (o.K.).





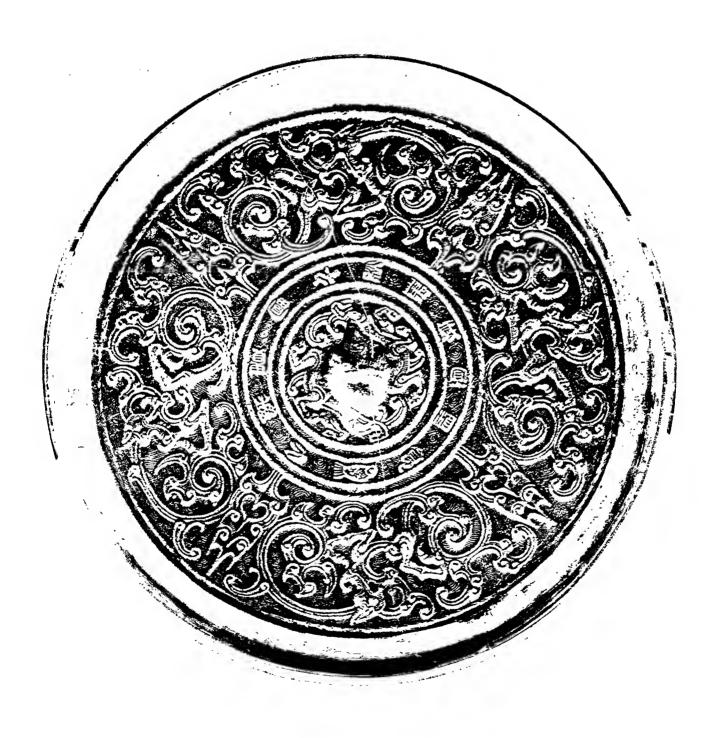


Large mirror with dragon scrolls on a ground of spiral and lozenge pattern and a border of characters.

From the Huai river valley.

Hallow! Col.

Hallwyl Coll. (o.E.).





A, C. Short belt hooks from the Huai river valley.

E.A.C. (o.k.),

B, D, E, F, G, I, L. Short belt hooks from the Huai river valley.

Hallwyl Coll. (o.K.).

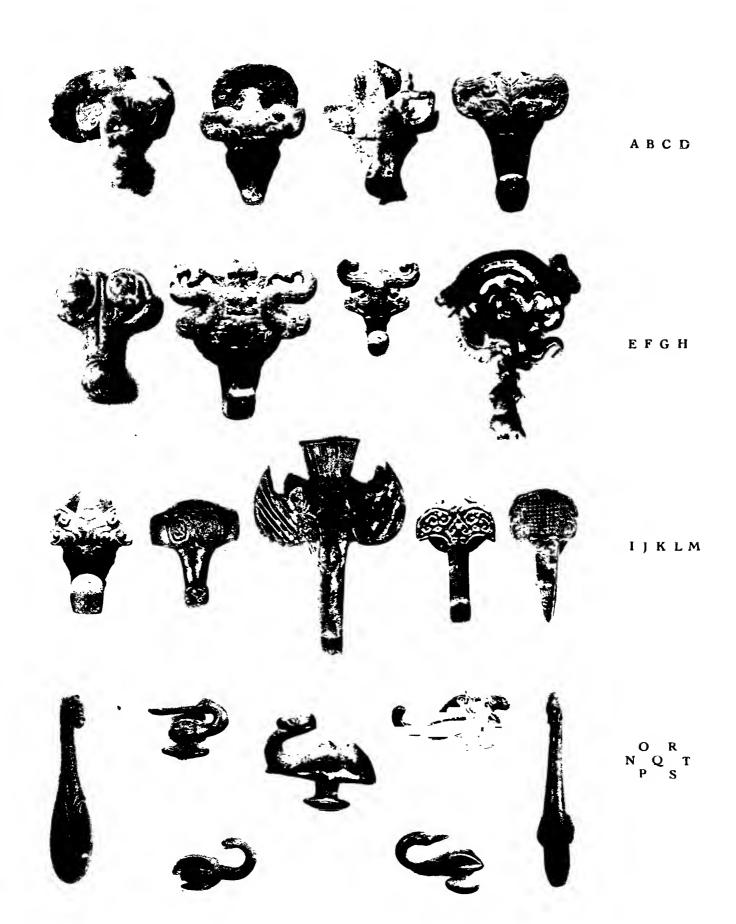
H. Belt hook in the shape of a coiled dragon.
J, M. Short belt hooks from the Huai river valley.
K. Bird-shaped belt hook.
N, T. Slender belt hooks.
O, P, R, S. Animal-shaped hooks for sword sheaths or belts (f)

Eumorfopoi

Eumorfopoulos Coll.

Q. Animal-shaped hooks for sword sheaths or belts (f)

Hallwyl Coll. (o.E.).





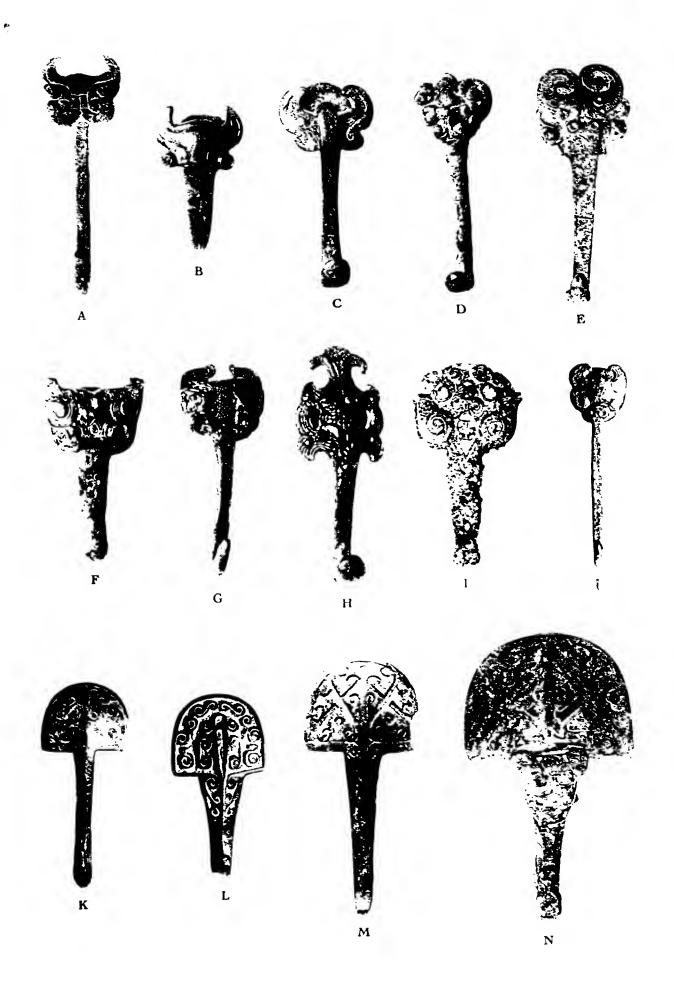
- A, C, D, E, I. Belt hooks with animal heads. Eumorfopoulos Coll.
- B, F, G, H. Belt hooks with zoomorphic motives.

Henri Riviére Coll.

- J. Belt hook with zoomorphic motives.
  K. L. Belt hooks with shield-shaped body.
  E.A.C. (0.5.).
- M. Belt hook with shield-shaped body.

  Hallwyl Coll.
- N. Belt hook with shield-shaped body.

  Eumorfopoulos Coll.





A, B, C, J, K. Long belt hooks with birds' heads.

heads.

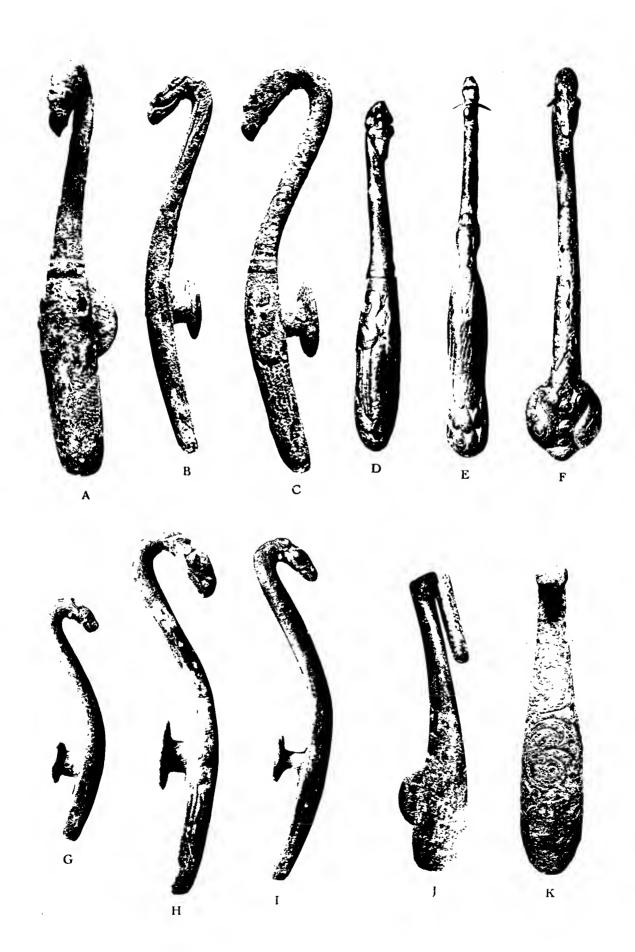
Hallwyl Coll. (o.k.).

D, E, F. Long belt hooks with birds' heads.

Henri Riviére Coll.

G, H, I. Long belt hooks with birds' heads.

E.A.C. (0.x.).





Ornamental fittings in bronze from the Huai river valley.

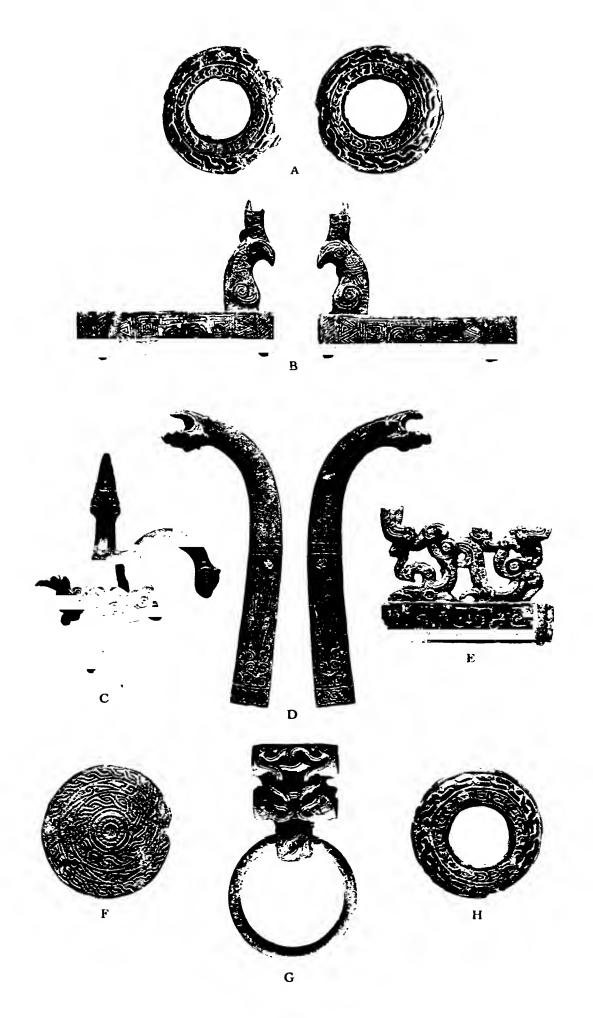
A. Flat rings with plait designs.

Hallwyl Coll. (O.E.).

Hallwyl C

B. Tubular fittings with birds' heads.
C. Finial with bird and dragon.
D. Pair of bow finials (f).
E. Tube-shaped fitting with dragon.
F. Flat button with plait design.
G. Ring holder.
H. Flat ring with plait design.

E.A.C. (0.5.).





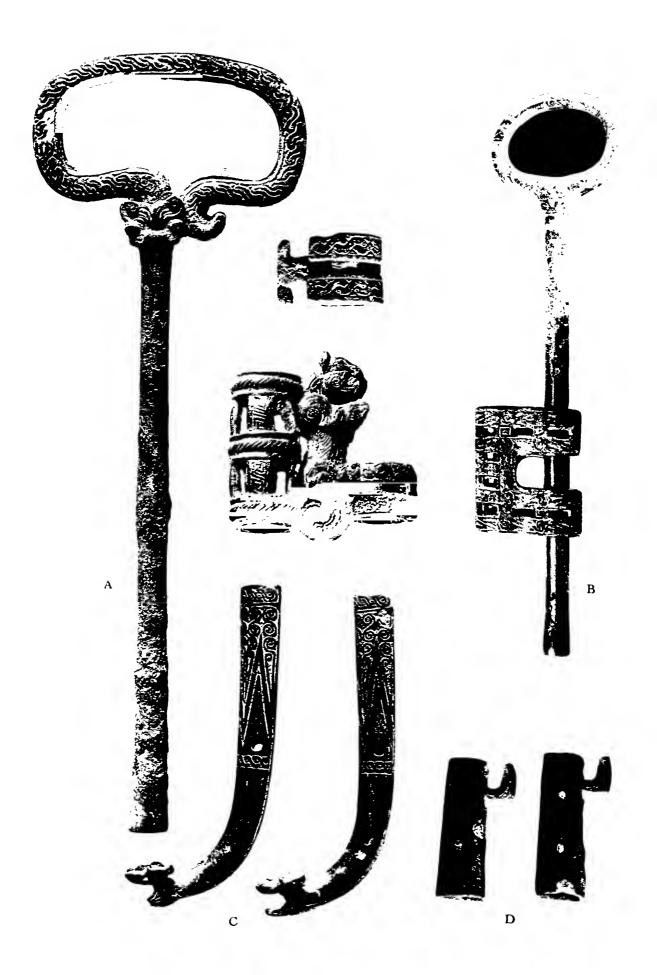
- A. Bolt and catch of a lock from the Huai river valley.
- B. Bolt and catch of a lock.

Hallwyl Coll.

C. A pair of dragon-shaped finials from the Huai river valley.

D. A pair of arrow tails from the Huai river valley.

Hallwyl Coll.



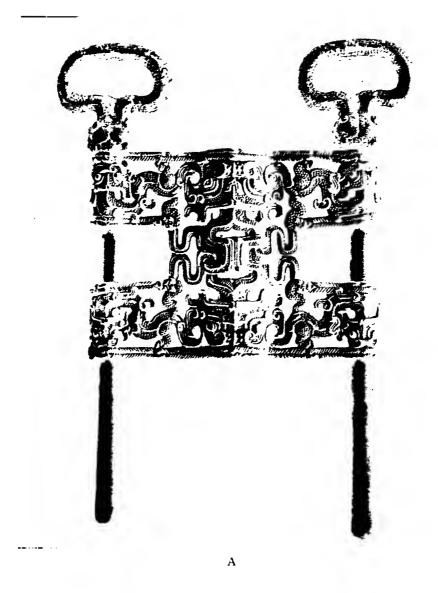


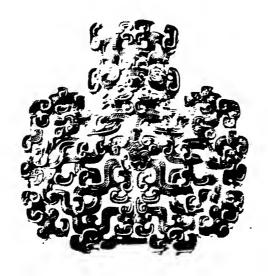
A. A lock with two cross-bolts.

B. A sword-hilt of gold.

David Weill Coll.

Eumorfopoulos Coll.







- PLAIE 93

  A, C. Small ring-holders from the Huai river valley.

  B. Flat ring from the Huai river valley.

  D, F. Tubular fittings from the Huai river valley.

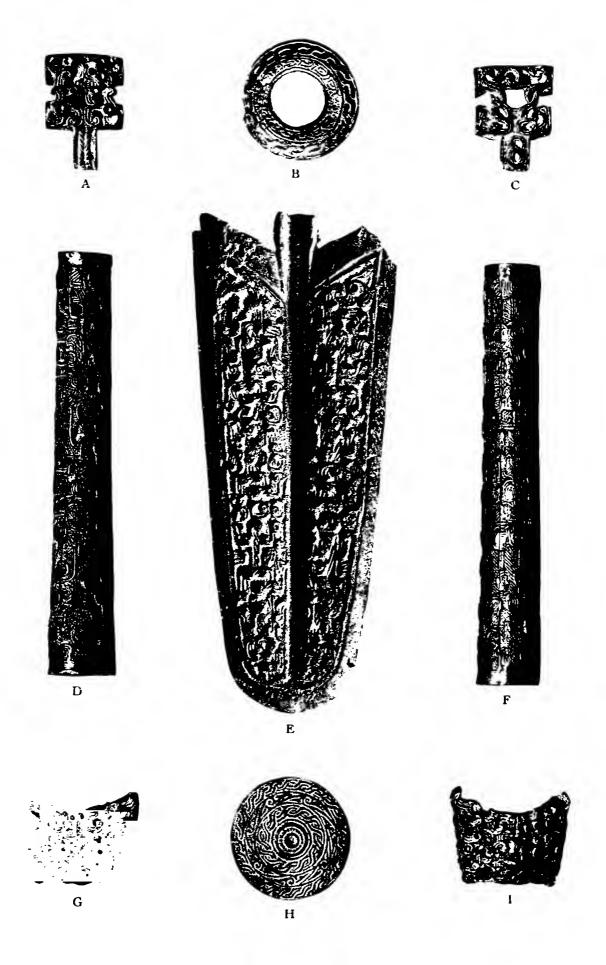
  G, I. Dagger hilts from the Huai river valley.

  H. Round button from the Huai river valley.

  E.A.C. (o.s.).

E. Ornamental plate from a sheath (f).

David Weill Coll.





A. Bird with a ring.

Sirén Coll.

B. Finial surmounted by coiling dragons.

Henri Rivière Coll.

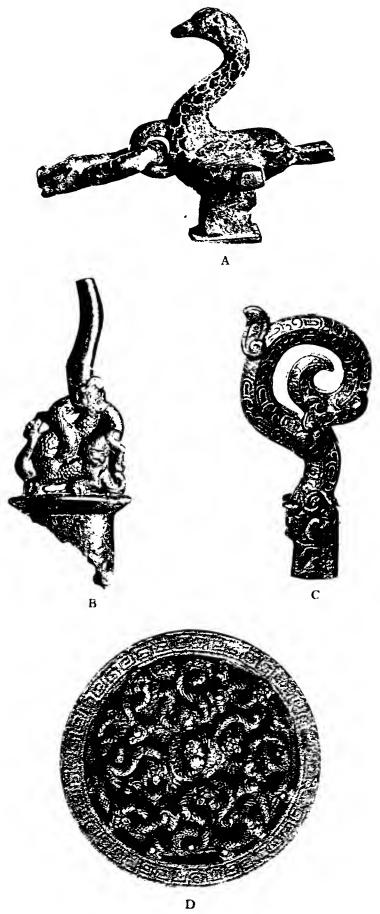
C. Shaft finial in the shape of a coiling snake.

Jean Sauphar Coll.

D. Round plaque or lid with coiling dragons in relief.

Metropolitan Mrs. New York

Metropolitan Mus., New York.





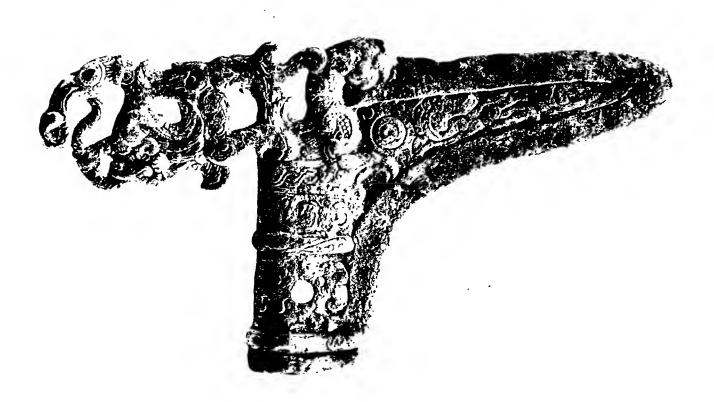
A. End fitting for the shaft of a ko weapon.

Henri Rivière Coll.

B. Ko weapon ornamented with dragons and other animals.

C. T. Loo & Co.



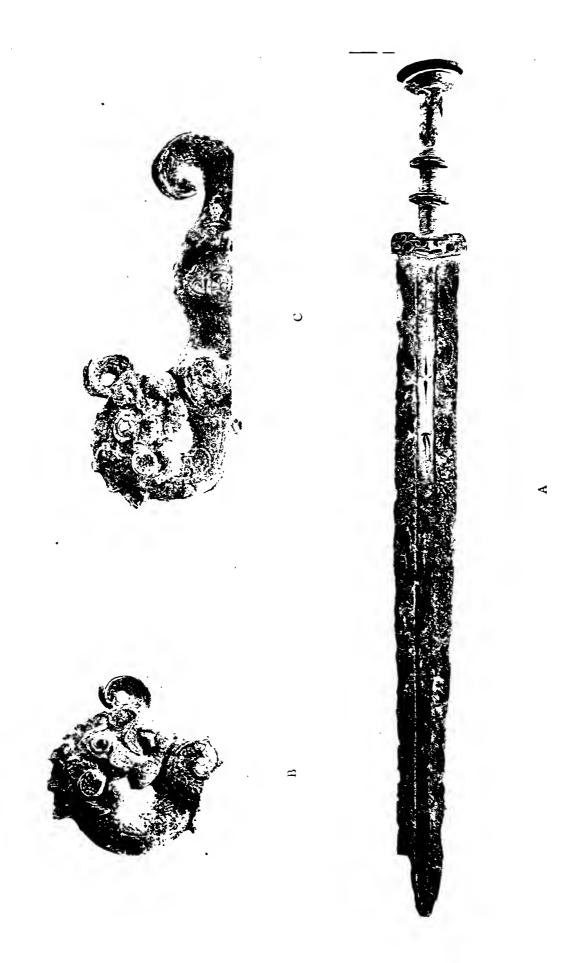




A. Bronze sword with inlaid ornaments on the hilt. From Li Yu.

B, C. Fantastic animals which have been fitted on sacrificial vessels. From Li Yu.

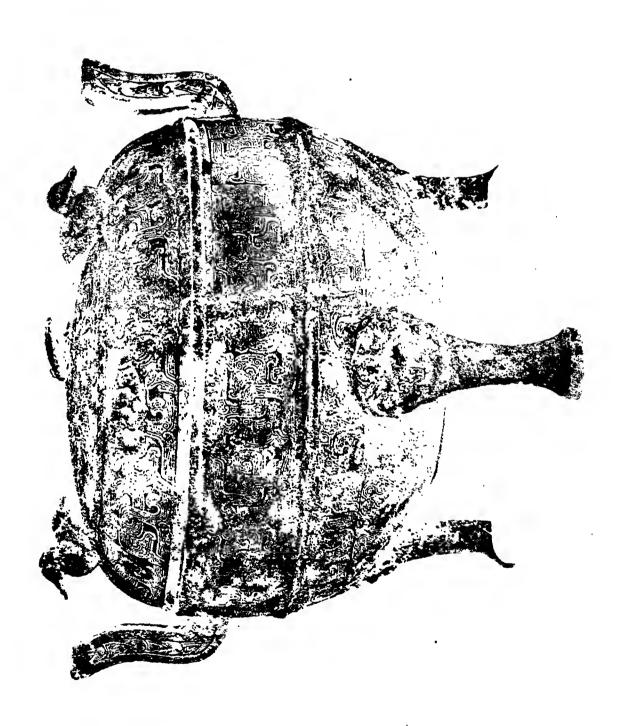
Wannieck Coll.





Ting with three birds on lid. From Li Yü.

Wannieck Coll.



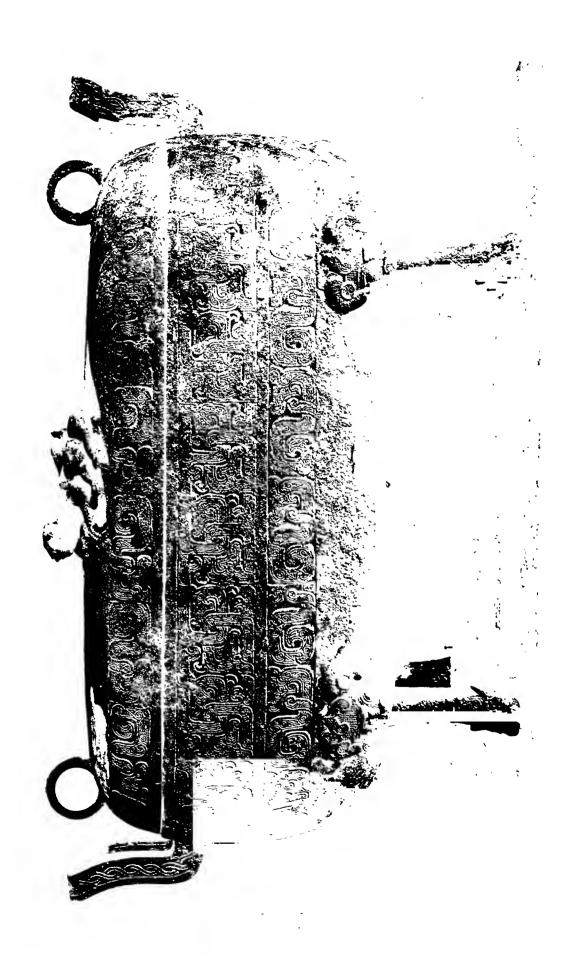
- - - - - - - -



Oblong vessel on four feet with two rams on the lid. From

Wannieck Coll.

•





Full view of the lid of the vessel shown in Plate 98.

Wannieck Coll.





Lid with four resting animals.

Sirén Coll.

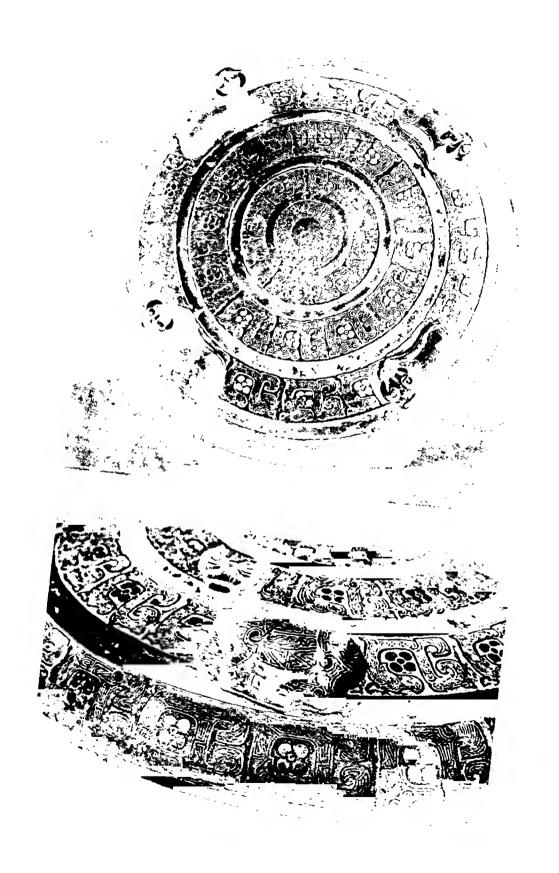




PLATE 101

Hu with animal and human figures in relief.

Stocket Coll.



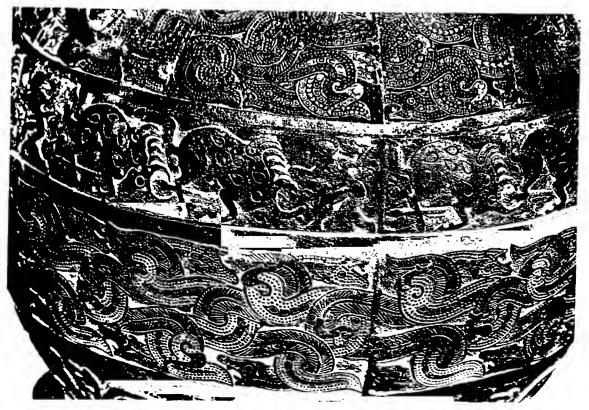




PLATE 102

Long-eared bovine animal. From Li Yii.

H. Oppenheim Coll.





A. Large cauldron.

Dr. O. Burchard Coll., Berlin.

B. Fu-shaped vessel.

Art Institute, Chicago (Buckingham Coll.).





Ton-shaped vessel with climbing animal.

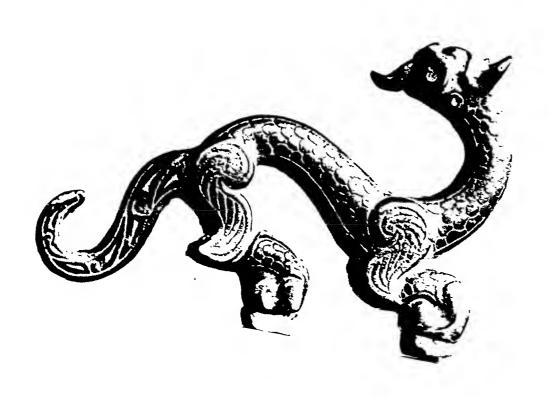
Metropoliton Mus., N.Y.





## PLATE 105 Bell handles in the shape of feline animals. Sirén Coll.

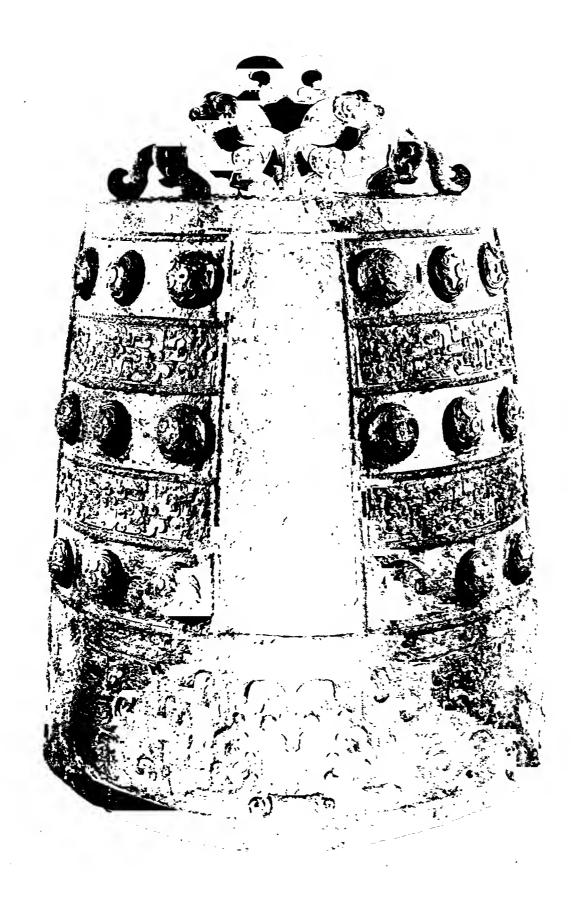






Large bell with handle of intertwining tigers.

Dr. Emil Hultmark, Stockholm, deposited E.A.C.



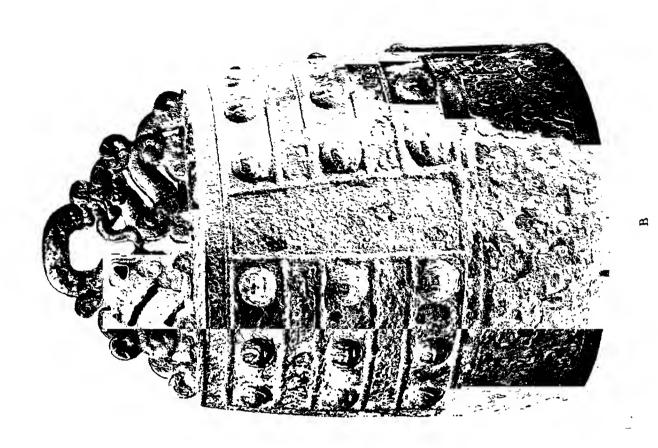


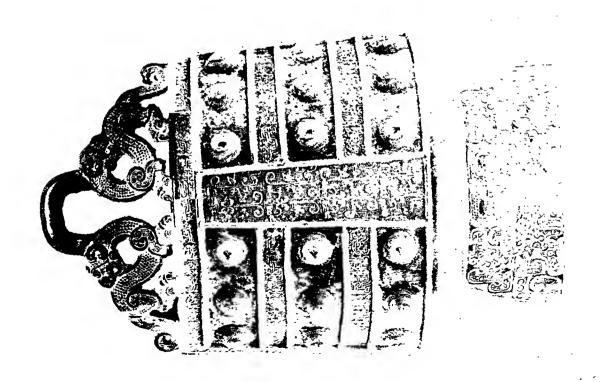
A. Small bell with a handle of two tigers.

Ex Dr. Burchard Coll.

B. Small bell with a handle of two tigers.

Stantliches Mus., Berlin.



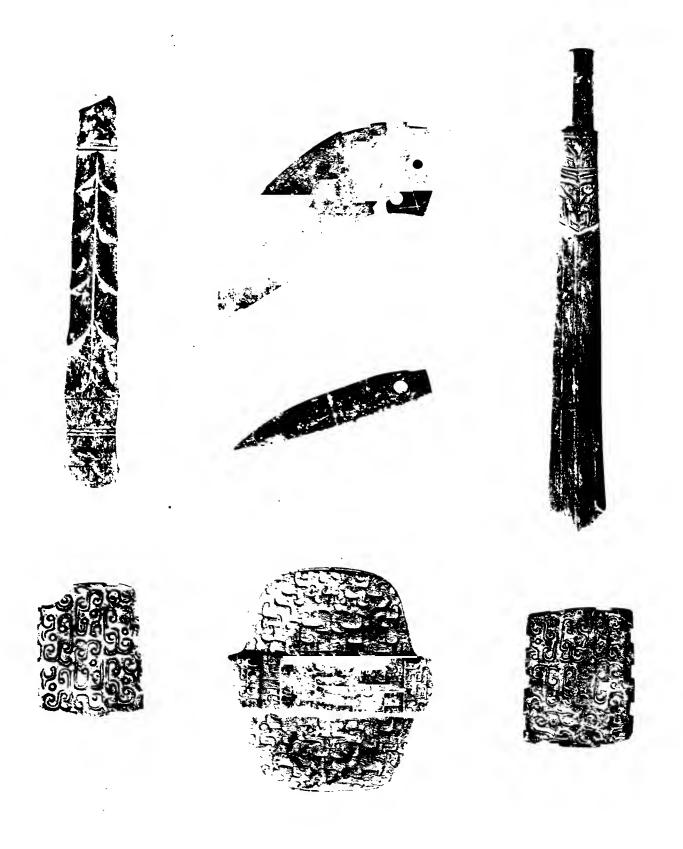




Jade buckles, handles and knives.

E.A.C. (0.5.).

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D.Q.A. 80.

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